# Service Manual

TOP NEXT

ORDER NO.DSD0406012C1

B24

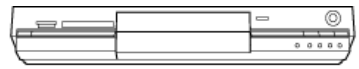
# Service Manual

DVD Video Recorder

- DMR-E95HP

Colour

(S).....Silver Type



**Notes: The part of DVD Drive (VXY1814) is listed separately.**
**Please refer ORDER No. RAM0402001C0**

When replacing with Digital P.C.B. or HDD, "UNFORMAT" indication is displayed and HDD must be formatted.
After that, programme in the HDD will be lost.
In detail, please refer to each content in this service manual.

## Specifications

| | |
|---|---|
| Power supply | AC120 V, 60 Hz |
| Power consumption | 39 W |
| Power consumption in standby mode | approx. 15 W |
| Recording system | DVD Video Recording format (DVD-RAM),<br>DVD Video format (DVD-R) |
| Optical pick-up | System with 1 lens, 2 integration units (658 nm wavelength for DVDs, 795 nm wavelength for CDs) |
| Recordable discs | • DVD-RAM: 12cm 4.7GB, 12cm 9.4GB, 8cm 2.8GB, 12cm 4.7GB (Ver. 2.1 /3X-SPEED DVD-RAM Revision 1.0)<br>• DVD-R: 12cm 4.7GB, 8cm 1.4GB (for General Ver. 2.0), 12cm 4.7GB (for General Ver. 2.0 /4X-SPEED DVD-R Revision 1.0) |
| Recording time | • Maximum 8 hours (with 4.7 GB disc)<br>XP: Approx. 1 hours<br>SP: Approx. 2 hours<br>LP: Approx. 4 hours<br>EP: Approx. 6 hours or 8 hours<br>• Maximum 284 hours<br>(with built in 160GB HDD)<br>XP: Approx. 36 hours<br>SP: Approx. 70 hours<br>LP: Approx. 138 hours<br>EP: Approx. 212 hours or 284 hours |
| Region number | Region No.1 |
| Playable discs | • DVD-RAM: 12cm 4.7GB, 12cm 9.4GB, 8cm 2.8GB, 12cm 4.7GB (Ver. 2.1 /3X-SPEED DVD-RAM Revision 1.0)<br>• DVD-R: 12cm 4.7GB, 8cm 1.4GB (for General Ver. 2.0), 12cm 4.7GB (for General Ver. 2.0 /4X-SPEED DVD-R Revision 1.0)<br>• DVD-VIDEO, DVD-Audio, CD-Audio (CD-DA), Video CD, CD-R/ CD-RW (MP3, CD-DA, Video CD formatted discs) |
| Built-in HDD Capacity | 160GB |

| | |
|---|---|
| **Audio system** | |
| Recording system | Dolby Digital 2ch, Linear PCM (XP mode, 2ch) |
| Input | LINE (pin jack) x3<br>Reference input: 309 mVrms<br>FS: 2 Vrms (1 kHz, 0 dB)<br>Input impedance: 47 kΩ |
| Output | LINE (pin jack) x2<br>Reference output: 309 mVrms<br>FS: 2 Vrms (1 kHz, 0 dB)<br>Output impedance: 1 kΩ<br>(Load impedance: 10 kΩ) |
| Digital Audio Out | Optical terminal<br>(PCM, Dolby Digtal, DTS) |
| Channel Number | 2ch (L/R) |
| **Card unit** | |
| Card Slot | SD memory card /PC Card Type Ⅱ |
| Compatible Media | • SD memory card /Multi Media Card<br>• A PC Card adaptor conforming to PC Card Standards<br>• ATA Flash PC Card<br>• PC Card Adaptor (SD memory Card, Multi Media Card , Compact Flash Smart Media, Memory Stick, XD picture card, Micro drive)<br>• Mobile HDD |
| Format | FAT12 , FAT16 |
| Image Format | • JPEG DCF(Design rule for Camera File system)<br>(subsampling: 4 : 2 : 2 or 4 : 2 : 0)<br>• TIFF (Uncompressed RGB chunky)<br>• DPOF Compatible Number of Pixels<br>34 x 34 - 6144 x 4096 |
| Thawing Time | Approx. 7sec (2Mpixels) |
| **Others** | |
| Dimensions | Approx.<br>430 (W) x 79 (H) x 291 (D) mm<br>[Approx. 16-15/16 ″ (W) x 3-1/8 ″ (H) x 11-15/32″ (D)] |
| Mass | Approx. 4.5 kg (9.9 lbs) |
| Operating Temperature | 5 °C-40°C (41 F-104 F) |

| | |
|---|---|
| | (MP3, CD-DA, Video CD formatted discs) |
| Built-in HDD Capacity | 160GB |
| Drive Unit | High Speed Drive (correspond to 4times speed with DVD-R disc and 3times speed with DVD-RAM disc) |
| DV Input | IEEE1394 Standard, 4pin |
| **Video system** | |
| Television system | NTSC color signal, 525 lines, 60 fields |
| Recording system | MPEG2 (Hybrid VBR) |
| Input | ・LINE (pin jack x3), 1.0 Vp-p; 75 Ω<br>・S connector x3<br>Y: 1.0 Vp-p; 75 Ω<br>C: 0.286 Vp-p; 75 Ω |
| Output | ・LINE (pin jack x2), 1.0 Vp-p; 75 Ω<br>・S connector x2<br>Y: 1.0 Vp-p; 75 Ω<br>C: 0.286 Vp-p; 75 Ω |
| Component video output (480P/480I) | Y: 1.0 Vp-p; 75 Ω<br>PB: 0.7 Vp-p; 75 Ω<br>PR: 0.7 Vp-p; 75 Ω |
| Antenna reception input | TV Channel: 2ch-69ch, 75 Ω<br>CATV Channel: 1ch-125ch, 75 Ω |

| | |
|---|---|
| | [Approx. 15-15/16″ (W) x 3-1/8 (H) x 11-15/32″ (D)] |
| Mass | Approx. 4.5 kg (9.9 lbs) |
| Operating Temperature | 5 ℃-40℃ (41 F-104 F) |
| Operating Humidity range | 10 %-80 % RH (no condensation) |
| Clock unit | Quartz-controlled 12-hour digital display |
| **LASER Specification (Class I LASER Product)** | |
| Wave Length | 795 nm, 658 nm |
| Laser Power | No hazardous radiation is emitted with the safety protection. |
| Solder | This model uses lead free solder (PbF) |

**Notes** : Mass and dimensions are approximate.
Specifications are subject to change without notice.

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**⚠ WARNING**

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

TOP NEXT

# 1 Safety precautions



1.1 General guidelines

1.1.1 Leakage current cold check

1.1.2 Leakage current hot check (See Figure 1 .)

# 1.1 General guidelines



1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.

2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.

3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

1.1.1 Leakage current cold check

1.1.2 Leakage current hot check (See Figure 1 .)

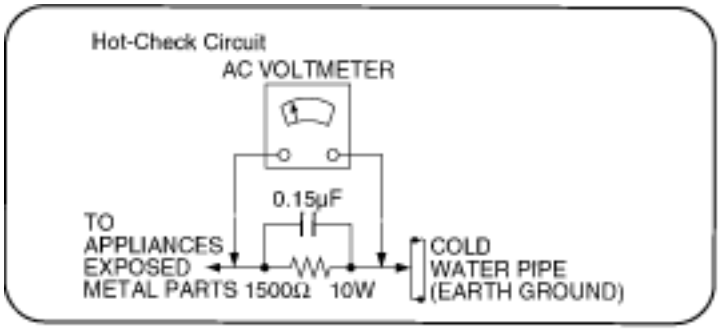
# 1.1.1 Leakage current cold check

TOP PREVIOUS NEXT

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.

2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to thechassis, the reading should be between 1MΩ and 5.2MΩ.
   When the exposed metal does not have a return path to the chassis, the reading must be

Figure 1




TOP PREVIOUS NEXT

# 1.1.2 Leakage current hot check (See Figure 1 .)



1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.

2. Connect a 1.5kΩ, 10 watts resistor, in parallel with a 0.15μF capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1 .

3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.

4. Check each exposed metallic part, and measure the voltage at each point.

5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.

6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliampere. In case a measurement isoutside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

# 2 Prevention of Electrostatic Discharge (ESD) to Electrostatic Sensitive (ES) Devices



Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatic Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistor-sandsemiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, whichshould be removed for potential shock reasons prior to applying power to the unit under test.

2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.

3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.

4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.

5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.

6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparableconductive material).

7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise hamless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficientto damage an ES device).

**IMPORTANT SAFETY NOTICE**

There are special components used in this equipment which are imporant for safety.
These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

TOP PREVIOUS NEXT

# 3 Precaution of Laser Diode



**CAUTION:**

This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pickup lens.
Wave length: 795 nm/658 nm
Maximum output radiation power from pickup: 100 μ W/VDE
Laser radiation from the pickup lens is safety level,but be sure the followings:

1. Do not disassemble the optical pickup unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pickup lens for a long time.

**ACHTUNG:**

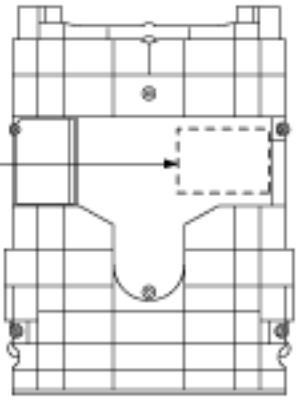
Dieses Produkt enthält eine Laserdiode.
Im eingeschalteten Zustand wird unsichtbare Leserstrahlung von der Laserinheit adgestrahit.
Wellenlänge: 795 nm/658 nm
Maximale Strahlungsleistung der Lasereinheit: 100 μ W/VDE
Die Strahlungan der Lasereinheit ungefährlich, wenn folgende Punkte beachtet werden:

1. Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.
2. Den werkseitig justierten Einstellregler der Lasereinhit nicht verstellen.
3. Nicht mit optischen Instrumenten in die Fokussierlines blicken.
4. Nicht über längere Zeit in die Fokussierlines blicken.



**Product complies with DHHS Rules 21 CFR Subchapter J in effect at date of manufacture.**
**Matsushita Electric Industrial Co., Ltd.**
**Kadoma, Osaka, Japan**



CAUTION!
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

# 4 How to replace the Lithium Battery



## REPLACEMENT PROCEDURE

1. Remove the Top case and DVD-RAM drive unit with Main P.C.B. by referring the Disassembling Procedure.

2. Unsolder the Lithium Batteries: B7501 and then replace it into new one.

   ( As shown in 19.2.1. The Main P.C.B. )

## NOTE:

The lithium battery is a critical component. ( Type No.: CR2354-1GUF Manufactured by Panasonic. )

It must never be subjected to excessive heat or discharge.

It must therefore only be fitted in equipment designed specifically for its use.

Replacement batteries must be of the same type and manufacture.

They must be fitted in the same manner and location as the original battery, with the correct polarity contacts observed.

Do not attempt to re-charge the old battery or re-use it for any other purpose.

It should be disposed of in waste products destined for burial rather than incineration.

**(For English)**

**CAUTION**

Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type recommended by the equipment manufacturer.
Discard used batteries according to manufacturer's instructions.

**(For French)**

**PRECAUTION**

Le fait de remplacer incorrectement la pile peut présenter des risques d'explosion.
Remplacer la pile uniquement par une pile identique ou de type équivalent recommandée par le fabricant. Se débarrasser des piles usagées conformément aux instructions du fabricant.

# 5 Handling the Lead-free Solder

TOP PREVIOUS NEXT

5.1 About lead free solder (PbF)

TOP PREVIOUS NEXT

# 5.1 About lead free solder (PbF)



Distinction of PbF P.C.B.:

P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.

## Caution:

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a high temperature soldering iron. In case of the soldering iron with temperature control,please set it to 700 ± 20°F (370 ± 10°C).
- Pb free solder will tend to splash when heated too high (about 1100°F/600°C).
- When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.

# 6 Each Buttons





# 7 Taking out the Disc from RAM-Drive Unit when the Disc cannot be ejected by OPEN/CLOSE button

TOP PREVIOUS NEXT

7.1 Forcible Disc Eject

7.1.1 When the power can be turned off.

7.1.2 When the power can not be turned off.

7.2 When the Forcible Disc Eject can not be done.

TOP PREVIOUS NEXT

# 7.1 Forcible Disc Eject

TOP PREVIOUS NEXT

7.1.1 When the power can be turned off.

7.1.2 When the power can not be turned off.

TOP PREVIOUS NEXT

# 7.1.1 When the power can be turned off.



1. Turn off the power and press [STOP] [CH UP] keys on the front panel simultaneously for 5 seconds.

# 7.1.2 When the power can not be turned off.

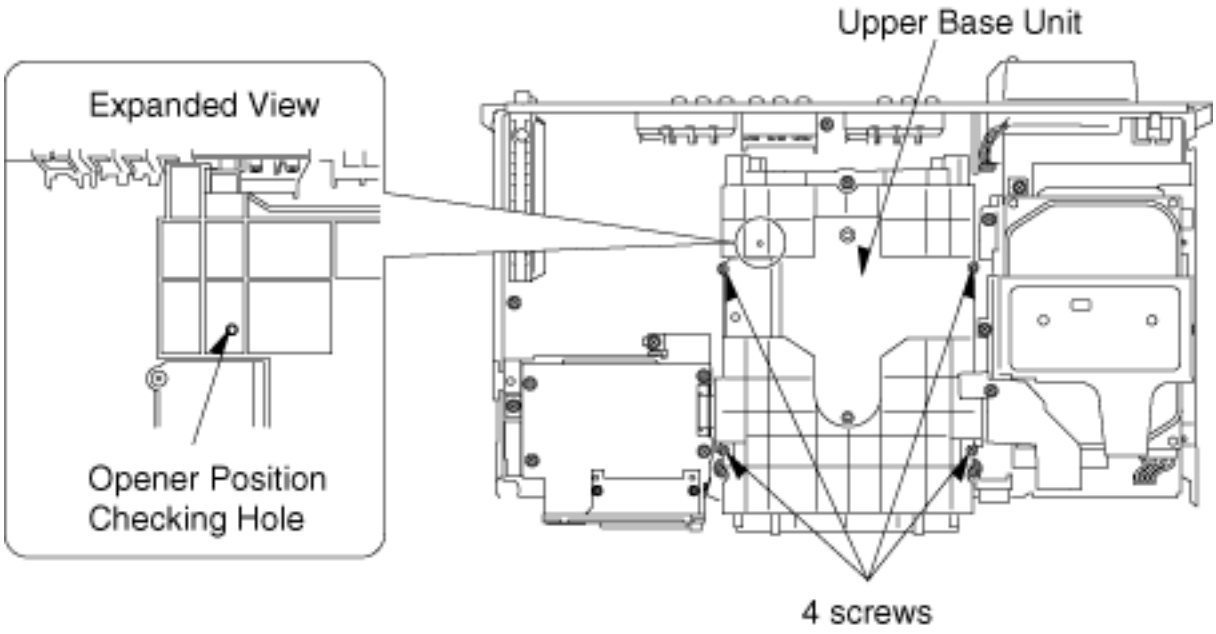


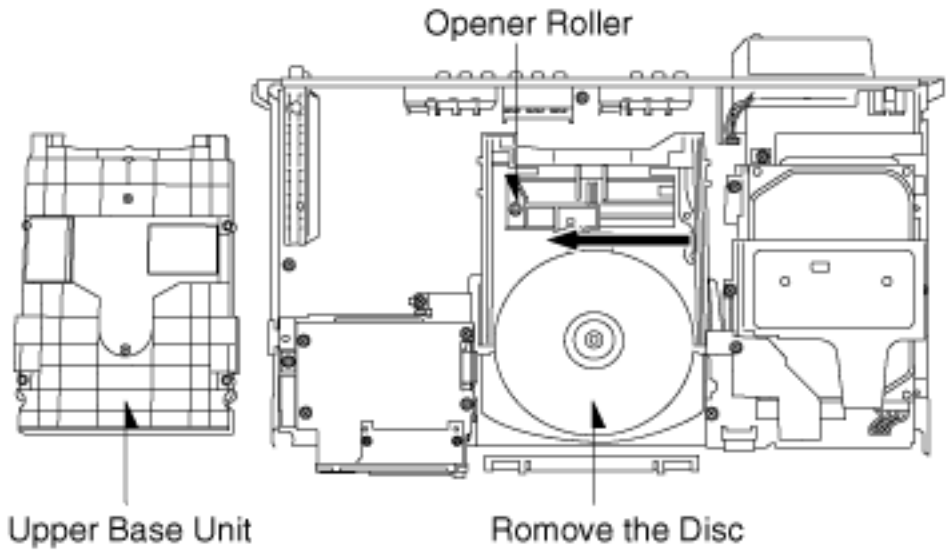
1. Press [POWER] key on the front panel for over 10 seconds to turn off the power forcibly, and press [STOP] [CH UP] keys on the front panel simultaneously for 5 seconds.

# 7.2 When the Forcible Disc Eject can not be done.



1. Turn off the power and pull out AC cord.
2. Remove the Top Case.
3. Remove the Front Panel.
4. Remove 4 screws and Upper Base Unit from DVD-RAM Drive.
5. Take out the disc and put the Opener Roller on fully position for direction of Arrow.
6. Put the Upper Base Unit so that the Opener Roller is inserted into the groove.
7. Check center of Opener Roller is seen through the Opener position Checking Hole, and tighten 4 screws.




TOP PREVIOUS NEXT

# 8 Service Explorer



Confirm RAM-Drive Last Error in Service Mode

Execute Service Mode

1. Press [STOP], [TIME SLIP] and [OPEN/CLOSE] simultaneously for 5 seconds when P-off.

   FL Display:

   SERVICE MODE

   *After finishing display (7). Factor of Drive Error occurring , press [0] [2] ~[9] [9] keys of the Remote Controller so that 99 memories can be displayed as maximum.

2. Press [4] [2] keys of remote controller.

   Example of FL Display:

   (1) Error Number is displayed for 5 seconds.

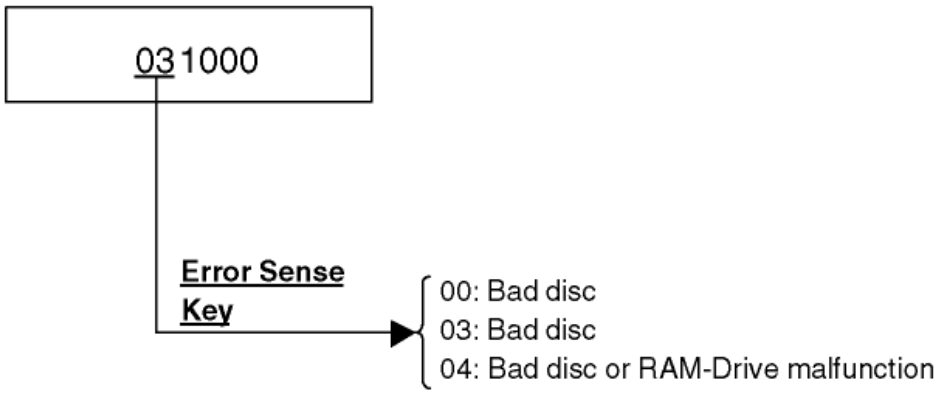
   NO 01

   (2) Time when the error has occurred is displayed for 5 seconds.

   40216191526

   The error has occurred at 2004(year)/Feb.(month)/16(day)/19(hour):15(minute):26(second)

   (3) Last Drive Error (1/2) is displayed for 5 seconds.


**When above error codes are displayed, confirm operation with Panasonic RAM disc or Panasonic DVD-R disc.**
***If the operation is OK, judge the error is due to media.**
***If the operation is NG and symptom as BLOCK NOISES and so on that are particular symptom of Digital appears, judge the error is due to RAM-Drive or Digital PCB.**

   (4) Last Drive Error (2/2) is displayed for 5 seconds.

   00 13 00 00

   *This error code is unnecessary for service.

   (5) Error occurring Disc type is displayed for 5 seconds.




(6) Disc Maker´s ID is displayed for 5 seconds.




Example of Disc Maker´s ID:

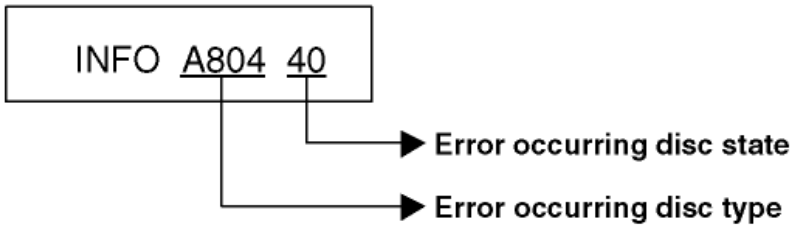
DVD-R Disc

| No. | FL Display (Disc Maker´s ID) | Disc Maker | Country |
|---|---|---|---|
| 1 | MEI | Panasonic | Japan |
| 2 | PVC | Pioneer | Japan |
| 3 | MCC | Mitsubishi Chemical Corporation | Japan |
| 4 | TDK | TDK | Japan |
| 5 | MXL | Maxell | Japan |
| 6 | MCI | MITUI CHEMICALS | Japan |
| 7 | JVC | Victor JVC | Japan |
| 8 | TAIYOYUDEN | Taiyo yuden | Japan |
| | TYG | | |
| 9 | GSC | Giga Storage | Taiwan |
| 10 | PRODISC | Prodisc | Taiwan |
| 11 | PRINCO | PRINCO | Taiwan |
| 12 | RITEK | RITEK | Taiwan |
| 13 | OPTDISC | OPTDISC | Taiwan |
| 14 | LEAD DATA | LEAD DATA | Taiwan |
| 15 | CMC | CMC | Taiwan |
| 16 | AUVISTAR | AUVISTAR | Taiwan |
| 17 | ACER | Acer | Taiwan |
| 18 | VIVASTAR | VIVASTAR | Switzerland |
| 19 | LGE | LG Electronics | Korea |

DVD-RAM Disc

| No. | FL Display (Disc Maker´s ID) | Disc Maker | Country |
|---|---|---|---|
| 1 | MEI | Panasonic | |
| 2 | MATSUSHITA | Panasonic | Japan |
| 3 | MXL | Maxell | Japan |
| 4 | PRODISC | Prodisc | Taiwan |
| 5 | OPTDISC | OPTDISC | Taiwan |
| 6 | CMC | CMC | Taiwan |

*Since an display is arbitrarily set up by the disk producer side, the above-mentioned display may be changed. Please make it reference as an example of a display.(7) Factor of Drive Error occurring is left displayed




Error Occurring Disc Type

| FL Display | Disc Type |
|---|---|
| 00 | DVD-ROM/Video |
| 01 | Audio-CD |
| 02 | 2.6GB DVD-RAM |
| 03 | 4.7GB DVD-RAM |
| 04 | DVD-R |

Error Occurring Disc State

| FL Displays (Hexadecimal) | Description | | | |
|---|---|---|---|---|
| | Disc distinction state | Cartridge disc state | Cartridge disc state | Disc size |
| 00 | OK | With cartridge | Has not been opened yet. | 12 cm |
| 10 | OK | With cartridge | Has not been opened yet. | 8 cm |
| 20 | OK | With cartridge | Has been opened. | 12 cm |
| 30 | OK | With cartridge | Has been opened. | 8 cm |
| 40 | OK | Bare | Has not been opened yet. | 12 cm |
| 50 | OK | Bare | Has not been opened yet. | 8 cm |
| 60 | OK | Bare | Has been opened. | 12 cm |
| 70 | OK | Bare | Has been opened. | 8 cm |
| 80 | NG | With cartridge | Has not been opened yet. | 12 cm |
| 90 | NG | With cartridge | Has not been opened yet. | 8 cm |
| A0 | NG | With cartridge | Has been opened. | 12 cm |
| B0 | NG | With cartridge | Has been opened. | 8 cm |
| C0 | NG | Bare | Has not been opened yet. | 12 cm |
| D0 | NG | Bare | Has not been opened yet. | 8 cm |
| E0 | NG | Bare | Has been opened. | 12 cm |
| F0 | NG | Bare | Has been opened. | 8 cm |

TOP PREVIOUS NEXT

# 9 Self-Diagnosis and Special Mode Setting



9.1 Self-Diagnosis Functions

9.2 Special Modes Setting

9.3 Service Modes

# 9.1 Self-Diagnosis Functions

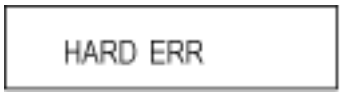


Self-Diagnosis Function provides information for errors to service personnel by Self-Diagnosis Display when any error has occurred.

U14, H** and F** are stored in memory and held.

Display on FL will be cancelled when the power is turned off or AC input is turned off during self-diagnosis display is ON.

| Error Code | Diagnosis contents | Description | Monitor Display | FL display |
|---|---|---|---|---|
| U12 | Remote control code error | Display appears when main unit and remote controller codes are not matched. | No display | *CHK REMOTE<br>* is remote controller code of the main unit. Display for 5 seconds. |
| U14 | Abnormal inner temperature detected | Display appears when the drive temperature exceeds 70°C. The power is turned off forcibly. For 30 minutes after this, all key entries are disabled. (Fan motor operates at the highest speedfor the first 5 minutes. For the remaining 25 minutes, fan motor is also stopped.) The event is saved in memory as well. | No display | U14<br>U14 is displayed for 30 minutes. |
| U99 | Hang-up | Displayed when communication error has occurred between Main microprocessor and Timer microprocessor. | No display | U99<br>Displayed is left until the [POWER] key is pressed. |
| H01 | Inoperative fan motor | Display appears when inoperative fan motor is detected after powered on. The power is turned off when detecting. | No display | H01<br>Displayed is left. |

| | | | | |
|---|---|---|---|---|
| F00 | No error information | Initial setting for error code in memory (Error code Initialization is possible with error code initialization and main unit initialization.) | No display |  Displayed is left. |
| F01 | Drive hardware error | Display appears when drive unit error is detected. The event is saved in memory. | No display |  Displayed is left. |
| F12 | Initialization error when main microprocessor is started up for program recording | Display appears when initialization error is detected after starting up main microprocessor for program recording. The event is saved in memory. The power is turned off when detecting. | No display |  Displayed is left. |
| UNSUPPORT | Unsupported disc error | *An unsupported format disc was played, although the drive starts normally. *The data format is not supported, although the media type is supported. *Exceptionally incase of the disc is dirty. | This disc is incompatible. |  Display for 5 seconds. |
| NO READ | Disc read error | *A disc is flawed or dirty. *A poor quality failed to start. *The track information could not be read. | Cannot read. Please check the disc. |  |
| HARD ERR | Drive error | The drive detected a hard error. | DVD drive error. | Display for 5 seconds.  |
| SELF CHECK | Restoration operation | Since the power cord fell out during a power failure or operation, it is under restoration operation. *It will OK, if a display disappears automatically. If a display does not disappear, thereis the possibility that defective Digital P.C.B. / RAM drive. | No display |  |

| | | | | |
|---|---|---|---|---|
| Full Program | 32 programs are already set. | 32 programs are already set. | No display |  |
| HDD SLEEP | In order to extend HDD life, the HDD is in SLEEP (not activated) mode. | If there is no disc in the unit, the HDD will go into SLEEP mode after there has been no operation for 30 minutes or longer.<br><br>*While in SLEEP mode play or recording may not begin rightaway because the HDD takes time to be re-activated. | |  |

TOP PREVIOUS NEXT

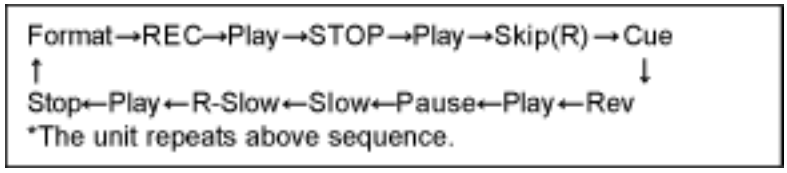
# 9.2 Special Modes Setting



| Item | | FL display | Key operation |
|---|---|---|---|
| Mode name | Description | | Front Key |
| TEST Mode | *All the main unit´s parameters (include tuner) are initialized. | TEST L1 | Press [SKIP (REV)], [TIME SLIP] and [OPEN/CLOSE] keys simultaneously for five seconds when power is off. |
| Service Mode | Setting every kind of modes for servicing. *Details are described in 9.3. Service Mode . | SERVICE MODE | When the power is off, press [STOP], [TIME SLIP] and [OPEN/CLOSE] keys simultaneously for 5 seconds. |
| Rating password | The audiovisual level setting password is initialized to Level 8 . | INIT | Open the tray, and press [SKIP (REV)] and [SKIP (FWD)] simultaneously for five seconds. |
| Forced disc eject | Removing a disc that cannot be ejected. The tray will open and unit will shift to P-off mode. *When Timer REC is ON or EXT-LINK is ON, execute " Forced disc eject " after releasing TimerREC or EXT-LINK. *This command is not effective during "Child lock" is ON. | The display before execution leaves. ********** | When the power is off, press [STOP] and [CH UP] keys simultaneously for five seconds. |
| Forced power-off | When the power button is not effective while power is ON, turn off the power forcibly.*When Timer REC is ON or EXT-LINK is ON, execute Forced Power-off after releasing Timer RECor EXT-LINK. Action: The tray will open, and the power will turn off. | Display in P-off mode. | Press [Power] key over than 10 seconds. |

| | | | |
|---|---|---|---|
| Aging | Perform sequence of modes as * Aging Description shown below continually. | Display following the then mode. | When the power is ON, press [CH DOWN], TIME SLIP] and [OPEN / CLOSE] simultaneously for over five seconds and less than 10 seconds.<br>*The [REC MODE] should be set to EP or LP.<br>*Whenthe unit has hung-up because of pressing keys for over 10 seconds, once turn off the power, and re-execute this command.<br>When releasing Aging mode, press [POWER] key. |
| Demonstration lock/unlock | Ejection of the disc is prohibited.<br>The lock setting is effective until unlocking the tray and not released by Main unit initialization of service mode. | *When lock the tray.<br>  <br><br>LOCK is displayed for 3 seconds. | When the power is on, press [STOP] and [POWER] keys simultaneously for five seconds. |
| | | *When unlock the tray.<br>  <br><br>UNLOCK is displayed for 3 seconds. | When the power is on, press [STOP] and [POWER] keys simultaneously for five seconds. |
| | | *When press OPEN/CLOSE key while the tray being locked.<br>  <br><br>Display LOCK for 3 seconds. | Press [OPEN/CLOSE] key while the tray being locked. |
| ATP Initialization | ATP setting is initialized, and the unit turns off automatically. | It is same with display in stop mode.<br>  <br> | When the power is on (E-E mode), press [CH UP] and [CH DOWN] simultaneously for five seconds. |
| Progressive initialization | The progressive setting is initialized to Interlace. | The display before execution leaves.<br>  <br> | When the power is on (E-E mode), press [STOP] and [TIME SLIP] simultaneously for five seconds. |

## Aging Contents (Example):


Format→REC→Play→STOP→Play→Skip(R)→Cue
Stop←Play←R-Slow←Slow←Pause←Play←Rev
*The unit repeats above sequence.

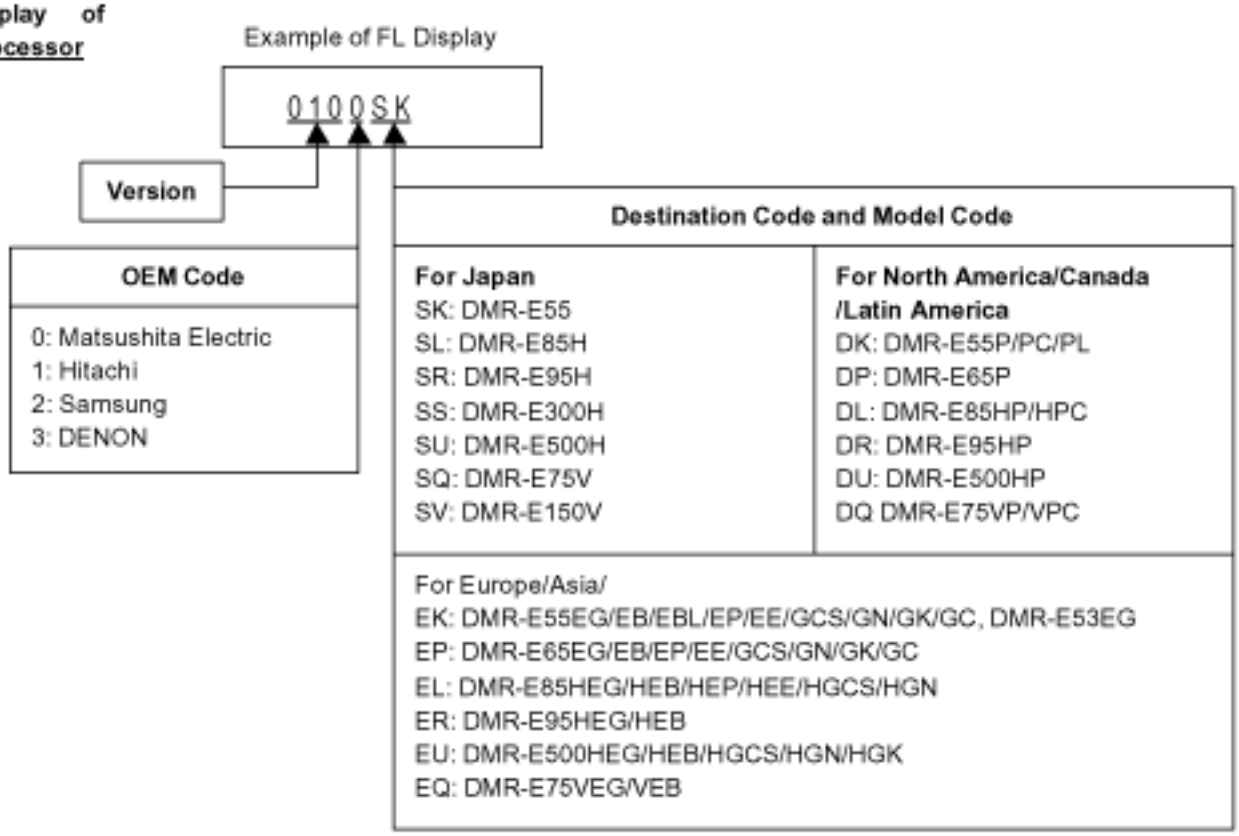
# 9.3 Service Modes



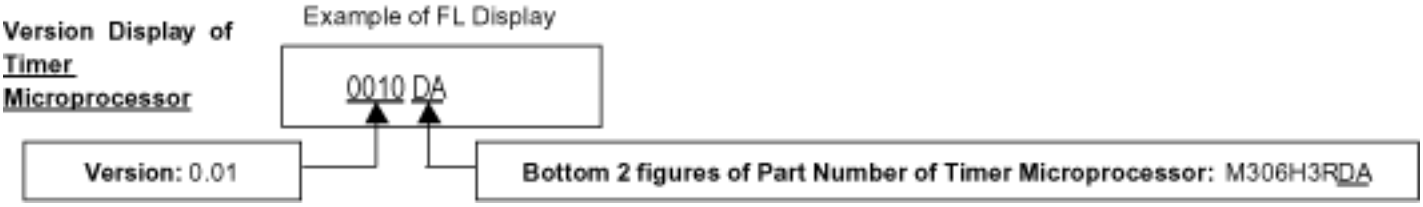
Service mode setting: While the power is off, press TIME SLIP, STOP and OPEN / CLOSE simultaneously for five seconds.

| Item | | FL display | Key operation |
|---|---|---|---|
| Mode name | Description | | (Remote controller key) |
| Release Items | Item of Service Mode executing is cancelled. | SERVICE MODE | Press [0] [0] or [Return] in service mode. |
| Error Code Display | Last Error Code of U14/H/F held by Timer is displayed on FL. *Details are described in 9.1. Self-Diagnosis Functions . | ♣□□<br>*♣ shows U/H/F.<br>□□ shows number. | Press [0] [1] in service mode |
| ROM Version Display | Region code, MAIN firm version, TIMER firm version and DRIVE firmware versions are displayed on FL for five seconds per each version in order, but ROM version will be left displayed. | REGION* **<br>MAIN ******<br>TIMER******<br>DRIVE ****<br>ROM * ***<br>•• are version displays. | Press [0] [2] in service mode |

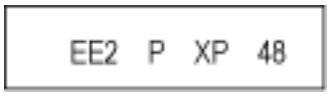
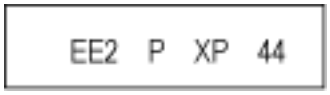
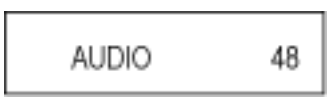
**Version Display of Main Microprocessor**

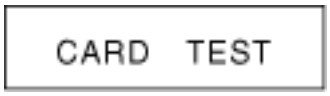
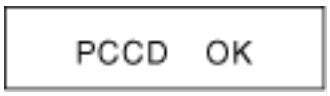
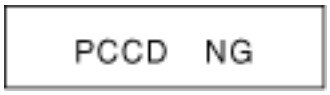
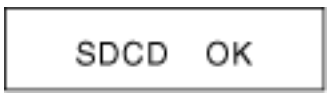
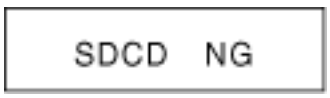


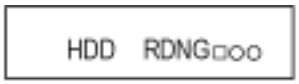
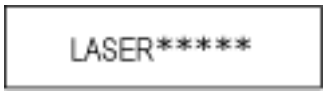
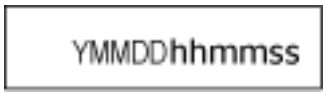

**Version Display of Timer Microprocessor**

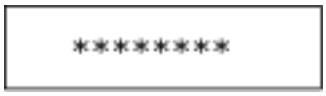
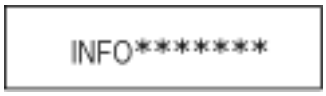
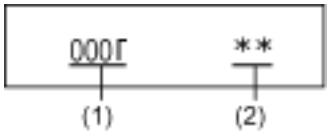



| | | | |
|---|---|---|---|
| White Picture Output | White picture is output as component Output from AV Decoder.<br>*White picture (Saturation rate : 100%)<br>*It is enable to switch Interlace/Progressive by I/Pswitch: [1] [4] | *Initial mode is Interlace .<br>WHIT I | Press [1] [1] in service mode. |
| | | Switch Interlace/Progressive<br>WHIT P | Press [1] [4] in White Picture Output mode.<br>*I/P are switched alternately. |
| Magenta Picture Output | Magenta picture is output with Component Output from AV Decoder.<br>*Magenta picture (Saturation rate: 100%)<br>*It is enable to switch Interlace/Progressive by I/Pswitch: [1] [4] | *Initial mode is Interlace .<br>MAGE I | Press [1] [2] in service mode. |

| | | | |
|---|---|---|---|
| | | Switch Interlace/Progressive<br>  | Press [1] [4] in Magenta Picture Output mode.<br>*I/P are switched alternately. |
| RTSC Return in XP (A & V) | L1 input signal is encoded (XP), decoded (XP) and output decoded signal to external without DISC recording and DISC playback. | Initial mode: EE2/ Interlace/ XP/ Audio 48kHz<br>  | Press [1] [3] in service mode. |
| | | Switch Interlace/Progressive<br>  | Press [1] [4] in RTSC Return XP mode.<br>*I/P are switched alternately. |
| | | Audio 44.1 kHz/ 48 kHz Switch<br>  | Press [2] [4] in RTSC Return XP mode.<br>*48 kHz / 44.1 kHz are switched alternately. |
| I/P Switch | Switch Interlace and Progressive in EE mode.<br>*Initial setting is Interlace .<br>*This command is effective during executing White Picture Output , MagentaPicture Output and RTSC Return in XP (A & V) modes. | Initial mode is Interlace<br>  <br>Switch Interlace/Progressive<br>  | Press [1] [4] in I/P Switch mode.<br>*I/P are switched alternately. |
| Audio Mute (XTMUTE) | Check whether mute is applied normally by the timer microprocessor. |  | Press [2] [1] in service mode. |
| Audio Mute (XDMUTE) | Check whether mute is applied normally by the Digital P.C.B. (GLUE IC). |  | Press [2] [2] in service mode. |
| Audio Pattern Output | The audio pattern stored in the internal memory is output<br>(Lch: 1kHz/-18dB)<br>(Rch: 400Hz/-18dB)<br>*Audio sound clock switching operation of DAC can beconfirmed by sub command [2] [4]. | Initial mode (Audio 48kHz)<br>  | Press [2] [3] in service mode. |

| | | | |
|---|---|---|---|
| | | Audio 44.1kHz/48kHz switching<br>  | Press [2] [4] in Audio Pattern Output mode.<br>*48 kHz / 44.1 kHz are switched alternately. |
| PC card WRITE/ READ Check | Check write/read function using the media and PC card adaptor with PC card slot. | It is displayed momentarily.<br>  <br>When the WRITE check is OK.<br>  <br>Whenthe WRITE check is NG.<br>  <br>*Note: The image stored in the media will be erased. | Insert a PC card adaptor with media to PC card slot, and press [7] [1] in service mode.<br>*Insert PC card adaptor with media while the power is off.<br>*Check for "PC" display on theFL display and execute this procedure. |
| JPEG Decode Check | Check Decode function using the media with image and PC card adaptor with PC card slot. | When the Decode check is OK, the first image stored in the media is displayed on the monitor TV.<br>  <br>When the WRITE check is NG.<br>  | Insert a PC card adaptor with media to PC card slot, and press [7] [2] in service mode.<br>*Insert PC card adaptor with media while the power is off.<br>*Check for [PC] display on theFL display and execute this procedure. |
| SD card WRITE check | Check SD card WRITE function with SD card slot. | When the WRITE check is NG.<br>  <br>When the WRITE check is OK.<br>  <br>*Note:The image stored in the SD card will be erased. | Insert a SD card to SD card slot, and press [7] [4] in service mode.<br>*Insert SD card while the power is off.<br>*Check for [SD] display on the FL display and go on the procedure. |

| | | | |
|---|---|---|---|
| HDD READ inspection | Perform a complete read inspection of the HDD. | When the HDD is OK<br>  <br><br>If the HDD is defective<br>  <br><br>**□ : Judge of Forward rate.**<br>*When normal (Forward rate is 35Mbps or more, and there is no HDD error): _ is Space.<br>*When Abnormal (Forward rate is less than 35Mbps): _ is X.<br>**○○ : Number of what have spent time for seeking over 100ms.**<br>*When normal: ○○ are spaces.<br>*When Abnormal: Display Number of what have spent time for seeking over 100ms. However, if the number is more than 100, Display [XX].<br>We judge it is normal that the number is less than 4. | Press [3] [1] in the service mode.<br>*When canceling the checking mode while executing, do "forced power-off".<br>Method:<br>Press the "POWER" button on the Front Panel more than 10 seconds. |
| Laser Used Time Indiction | Check laser used time (hours) of drive. |  <br><br>•(*****) is the used time display in hour.<br>•Laser used time ofDVD/ CD in Playback/Recording mode is counted. | Press [4] [1] in service mode. |
| Delete the Laser Used Time | Laser used time stored in the memory of the unit is deleted. |  <br> | Press [9] [5] in service mode. |
| RAM Drive Last Error | RAM Drive error code display.<br>*For details about the drive error code, refer to the Service Manual for the specific RAM Drive.<br>*Details are described in 8. Service Explorer . | 1. Error Number is displayed for 5 seconds.<br>  <br><br>2. Time when the error has occurred is displayed for 5 seconds.<br>  <br><br>Y: Year<br>MM: Month<br>DD: Day<br>hh: Hour<br>mm: Minute<br>ss: Second<br>3. Last Drive Error (1/2) is displayed for 5 seconds. | Press [4] [2] in service mode.<br>Then press [0] [1] ~ [9] [9], the past 99 errors are displayed. |

| | | | |
|---|---|---|---|
| | |  <br>4. Last Drive Error (2/2) is displayed for 5 seconds.<br>  <br>5. Error occurring Disc type is displayedfor 5 seconds.<br>  <br>6. Disc Maker ID is displayed for 5 seconds.<br>  <br>7. Factor of Drive Erroroccurring is left displayed<br>  | Incase that the supplier cannot be identified, display is black out. |
| Delete the Last Drive Error | Delete the Last Drive Error information stored on the DVD RAM-Drive. |  | Press [9] [6] in service mode. |
| Turn on all FL/LEDs | All segments of FL and all LEDs are turned on. | All segments are turned on. | Press [5] [1] in service mode. |
| S1 signal output | Forcibly superimpose the S1 signal (approx. 4.5V DC) on the EE chroma signal, and check the output on the S terminal. |  | Press [5] [2] in service mode. |
| S2 signal output | Forcibly superimpose the S2 signal (approx. 2V DC) on the EE chroma signal, and check the output on the S terminal. |  | Press [5] [3] in service mode. |
| Front connection inspection | Press all front keys and check the connection between Main P.C.B. and Front P.C.B. |  <br>(1) Each time a key is pressed, segment turned on increases one by one.<br>(2) Total umber of keys that have been pressed. | Press [5] [4] in service mode. |

| | | | |
|---|---|---|---|
| Production Date Display | Display the date when the unit was produced. | PD YYYYMMDD<br><br>YYY: Year<br>MM: Month<br>DD: Day | Press [6] [1] in service mode. |
| Display the accumlated working time | Display the accumulated unit´s working time. | **********<br><br>(Indicating unit: Second) | Press [6] [4] in service mode. |
| Display the Error History | Display the Error History stored on the unit. | Display reason of error for 5 seconds.<br><br>FTREC***<br><br>Display the time when the error has occurred for 5 seconds..<br><br>YYMMDDHHMM<br><br>YY: Year<br>MM: Month<br>DD: Day<br>HH: Hour<br>MM: Minute<br>Display the accumlated working time to occurring of the error for 5 seconds..<br><br>**********<br><br>(Indicating unit: Second) | Press [6] [5] in service mode. Then press [0] [1] ~ [1] [9], the past 19 error histories are displayed. |
| Delete the Error History | Delete Error History information stored on the unit. | CLR FTREC | Press [9] [7] in service mode. |
| Tray OPEN/CLOSE Test | The RAM drive tray is opened and closed repeatedly. | NO*********<br><br>* is number of open/close cycle times. | Press [9] [1] in service mode<br>*When releasing this mode, press the [POWER] button on Front Panel more than 10 seconds. |
| Error code initialization | Initialization of the last error code held by timer (Write in F00) | CLR E-CODE | Press [9] [8] in service mode. |

| | | | |
|---|---|---|---|
| Initialize Service | Last Drive Error, Error history and Error Codes stored on the unit are initialized to factory setting. |  | Press [9] [9] in service mode. |
| Finishing service mode | Release Service Mode. | Display in STOP (E-E) mode.<br>  | Press power button on the front panel in service mode. |

TOP PREVIOUS NEXT

# 10 Assembling and Disassembling

TOP PREVIOUS NEXT

10.1 Disassembly Flow Chart

10.2 P.C.B. Positions

10.3 Top Case

10.4 Front Panel

10.5 Front (R) P.C.B.

10.6 SD & PC Card P.C.B.

10.7 SD & PC Card P.C.B. Angle

10.8 Digital P.C.B.

10.9 DV Jack P.C.B.

10.10 HDD

10.11 HDD Bracket

10.12 DVD-RAM Drive

10.13 Rear Panel

10.13.1 Only Fan Motor

10.14 Main P.C.B.

10.15 Power P.C.B.

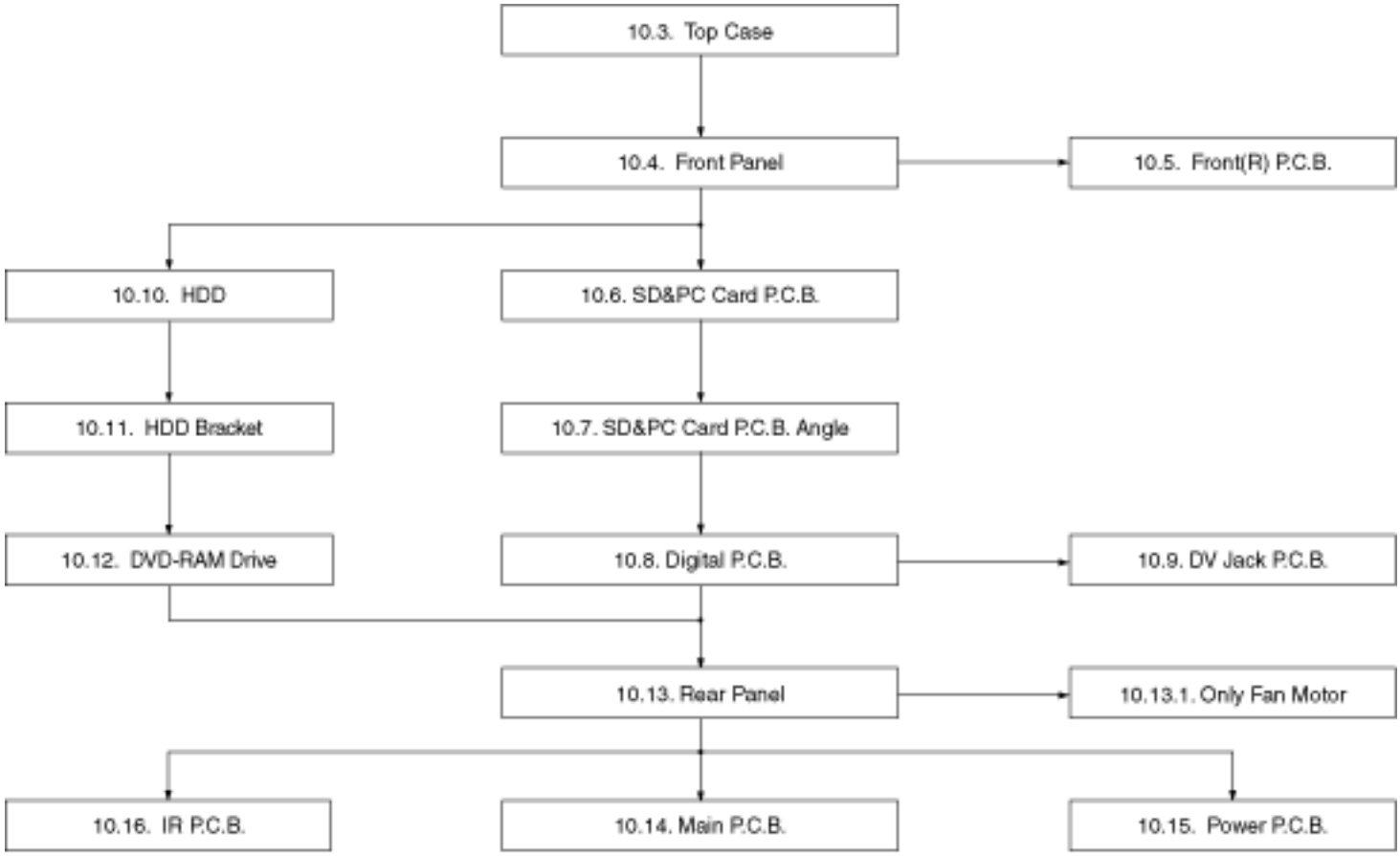
10.16 IR P.C.B.

# 10.1 Disassembly Flow Chart

TOP PREVIOUS NEXT

The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.

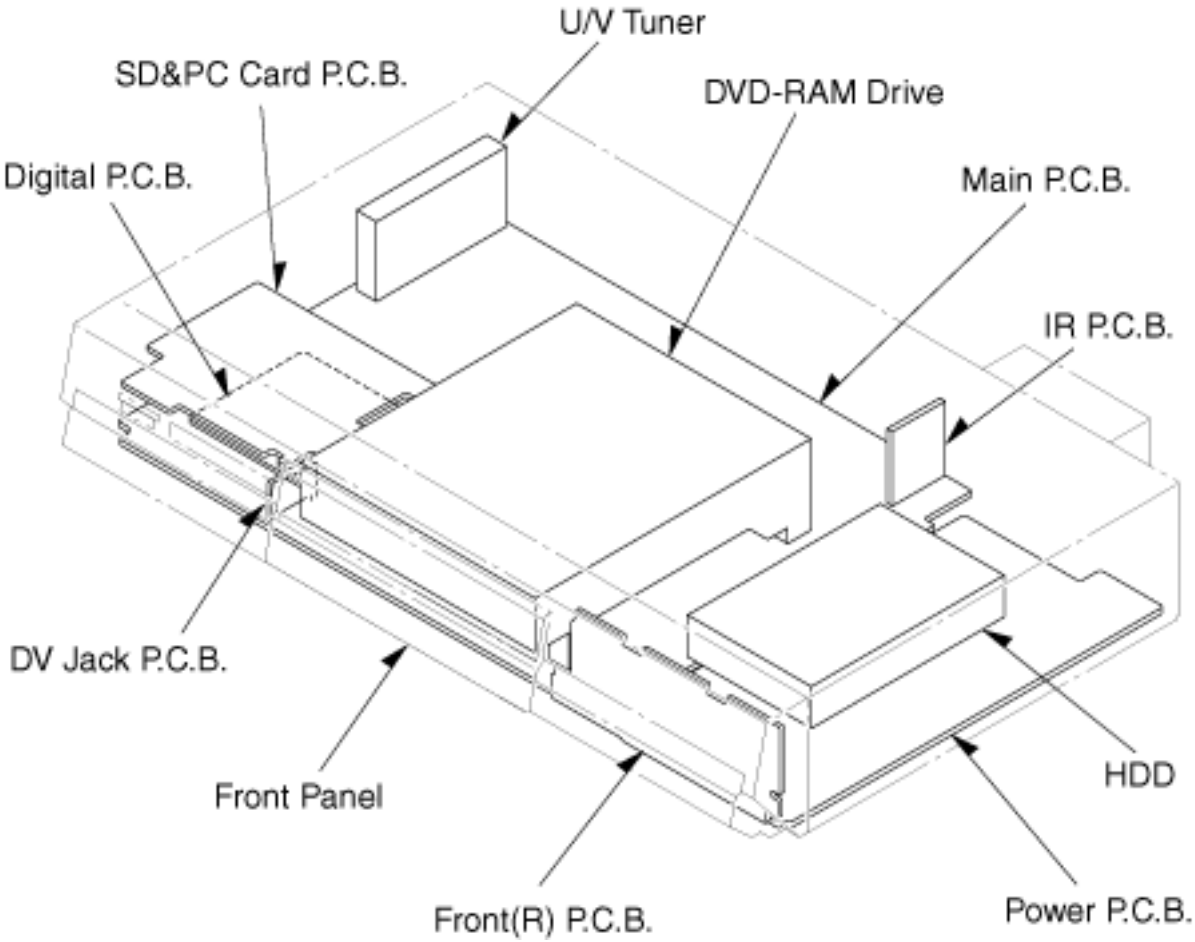
To assemble the unit, reverse the steps shown in the chart below.




TOP PREVIOUS NEXT

# 10.2 P.C.B. Positions



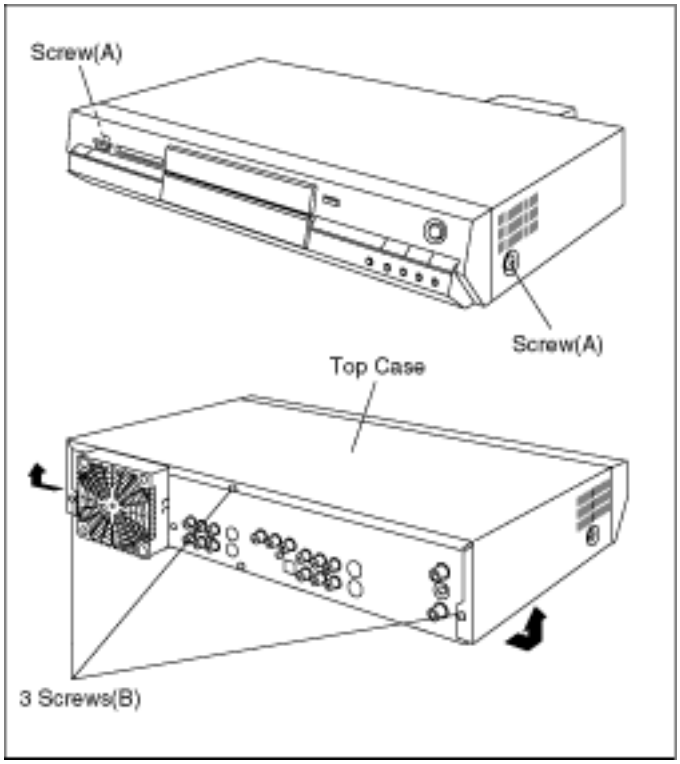


# 10.3 Top Case



1. Remove the 2 screws (A) and 3 screws (B).

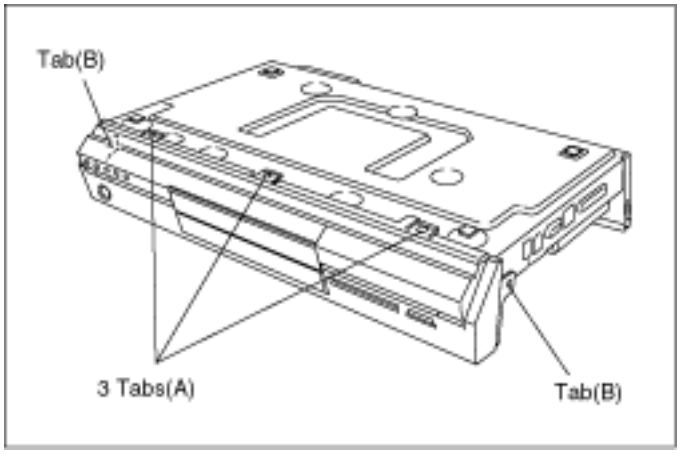
2. Open the both ends at rear side of the Top Case a little and lift the Top Case in the direction of the arrows.



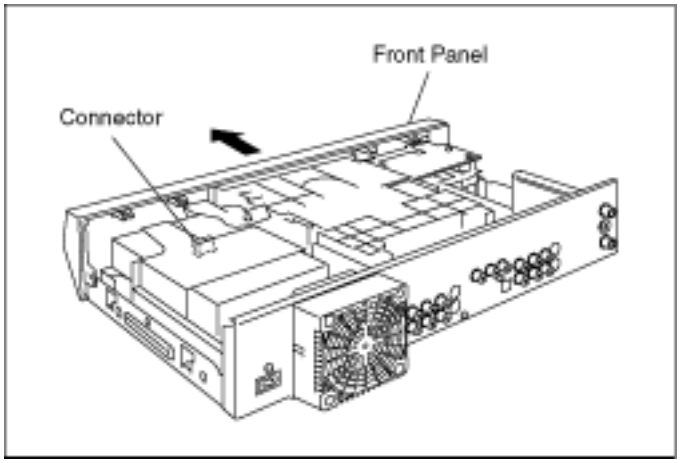
# 10.4 Front Panel



1. Remove 3 tabs (A) and 2 tabs (B) in this order. (The tab (A) and (B) should be removed at the same time, respectively.)



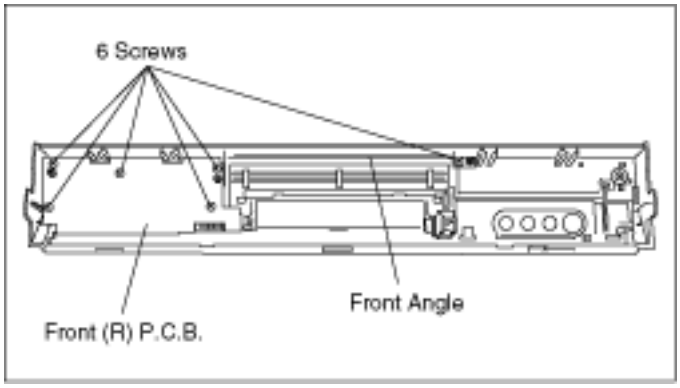

2. Move the front panel to front side straight and slowly so to remove it with Connector.



# 10.5 Front (R) P.C.B.

TOP PREVIOUS NEXT

1. Remove 6 screws and Front Angle.

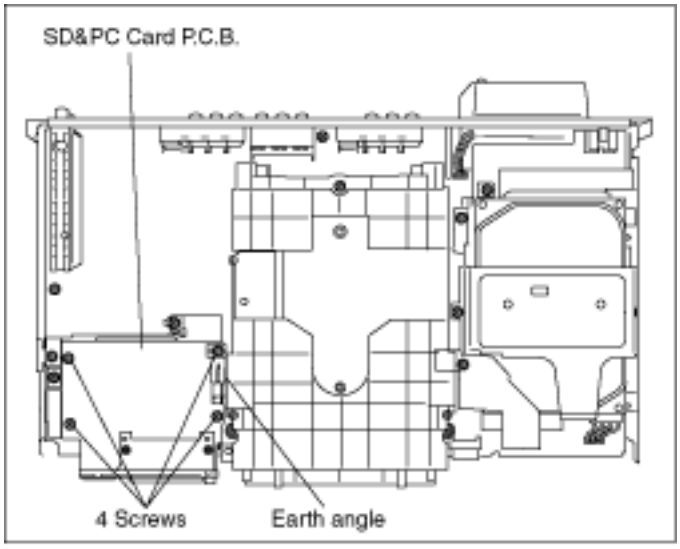



TOP PREVIOUS NEXT

# 10.6 SD&PC Card P.C.B.



1. Remove 4 screws with Earth Angle and lift up SD&PC Card P.C.B. vertically.

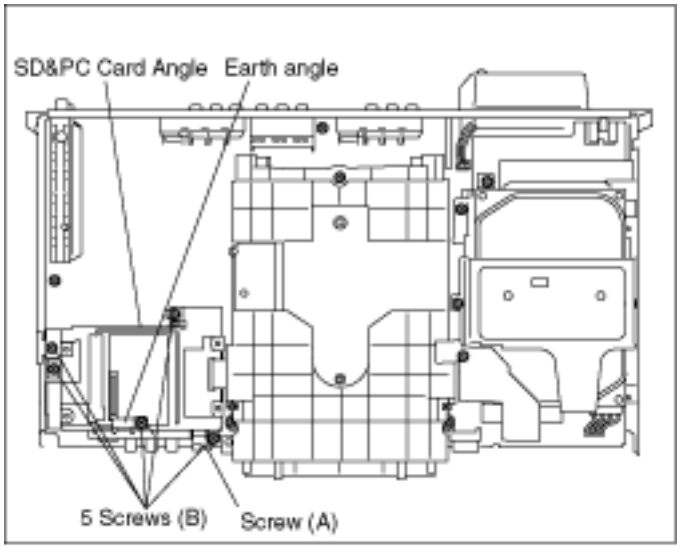


# 10.7 SD&PC Card P.C.B. Angle

TOP PREVIOUS NEXT

1. Remove one screw (A) fixing DV Jack section.

2. Remove 5 Screws (B) and lift up SD&PC Card P.C.B. Angle.




TOP PREVIOUS NEXT

# 10.8 Digital P.C.B.



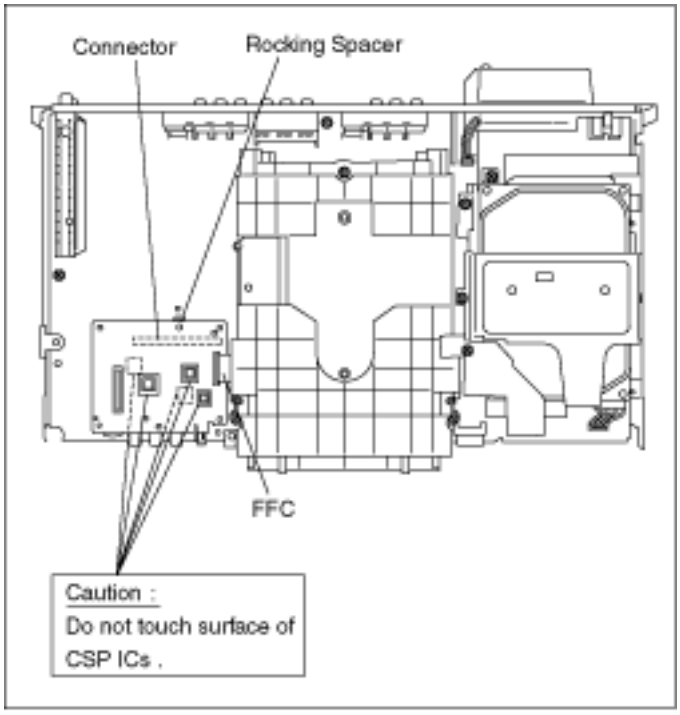
When replacing with Digital P.C.B., "UNFORMAT" indication is displayed and HDD must be formatted.
After that, **programme in the HDD will be lost.**
- How to format the HDD -
1) After "UNFORMAT" is displayed on the FL display, warning message for HDD format is appeared on the TV screen.
2) Select "YES" and press "ENTER" button on the remote controller, HDD will be formatted automatically.

1. Remove the FFC.
2. Unlock a Rocking Spacer.
3. Lift up Digital P.C.B. slightly so to disconnect Connector to remove Digital P.C.B.

CAUTION 1:

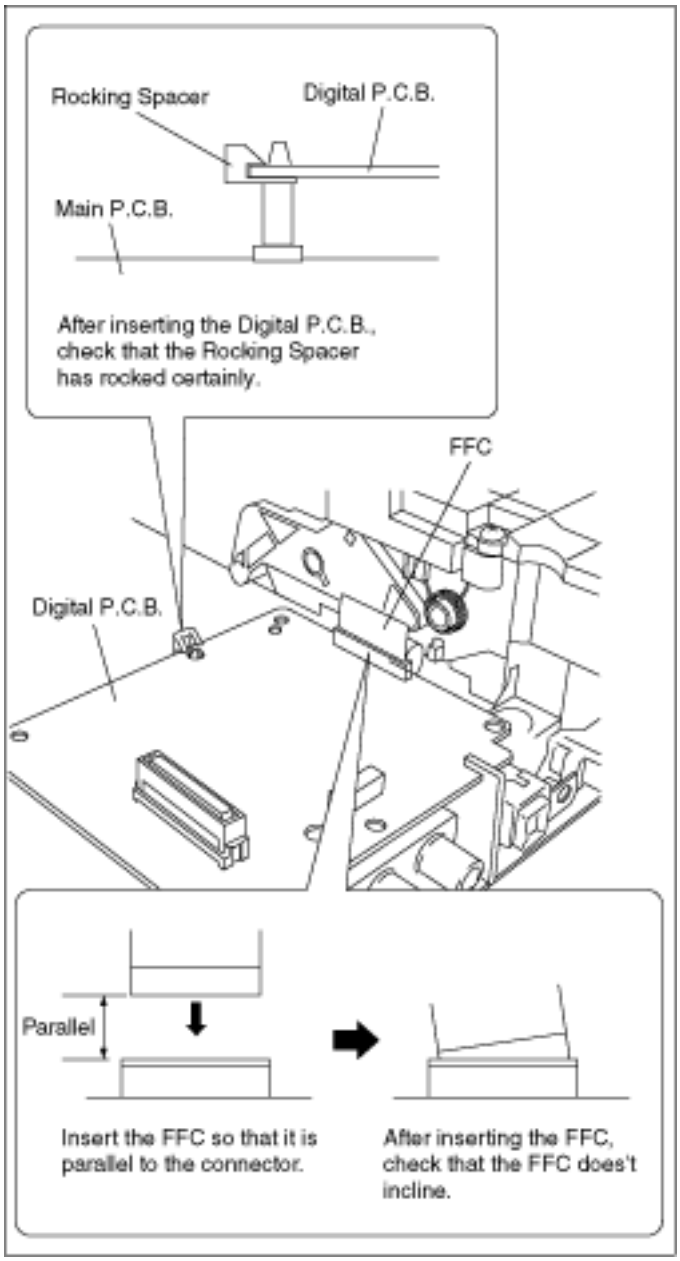
When replacing Digital P.C.B., pay attention to inserting FFC, and be careful to do not touch surface of CSP ICs.

If you have touched surface of CSP IC, clean up with alcohol and so on to prevent oxidation.




## CAUTION2:

When replacing Digital P.C.B., pay attention as below.

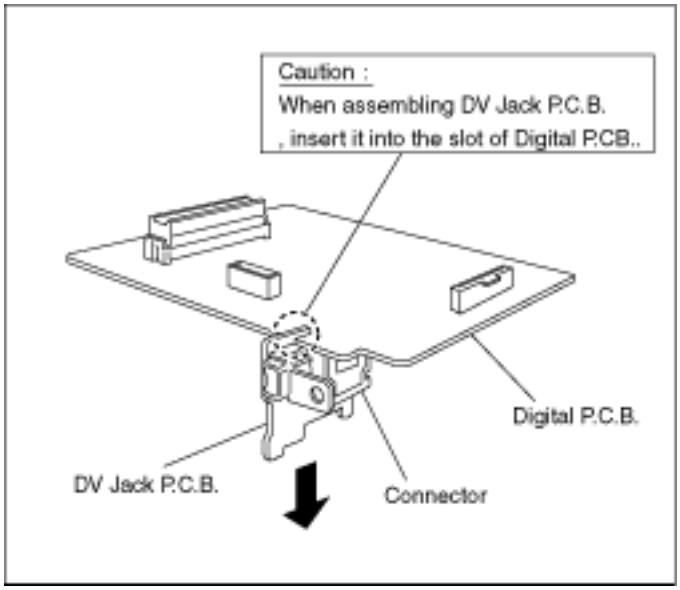



TOP PREVIOUS NEXT

# 10.9 DV Jack P.C.B.



1. Pull out DV Jack P.C.B. in the direction of the arrow.



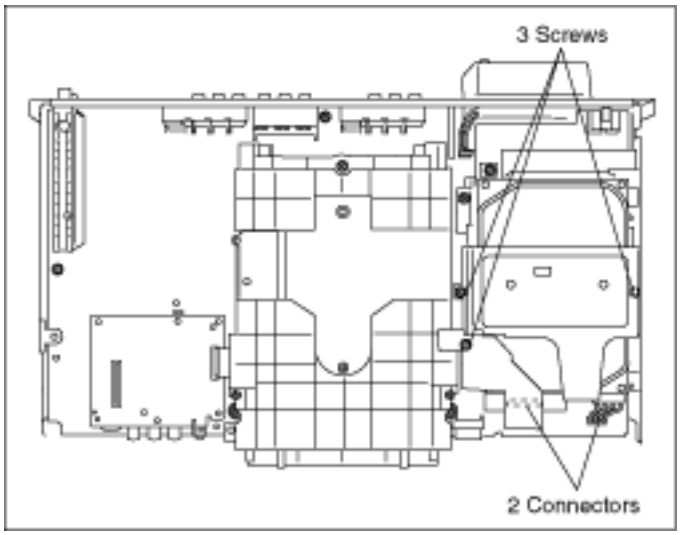
# 10.10 HDD

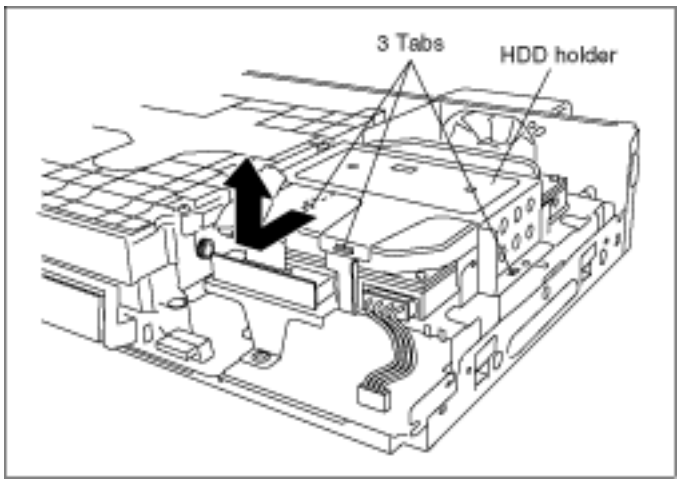


When replacing with HDD, "UNFORMAT" indication is displayed and HDD must be formatted.
After that, **programme in the HDD will be lost.**
- How to format the HDD -
1) After "UNFORMAT" is displayed on the FL display, warning message for HDD format is appeared on the TV screen.
2) Select "YES" and press "ENTER" button on the remote controller, HDD will be formatted automatically.

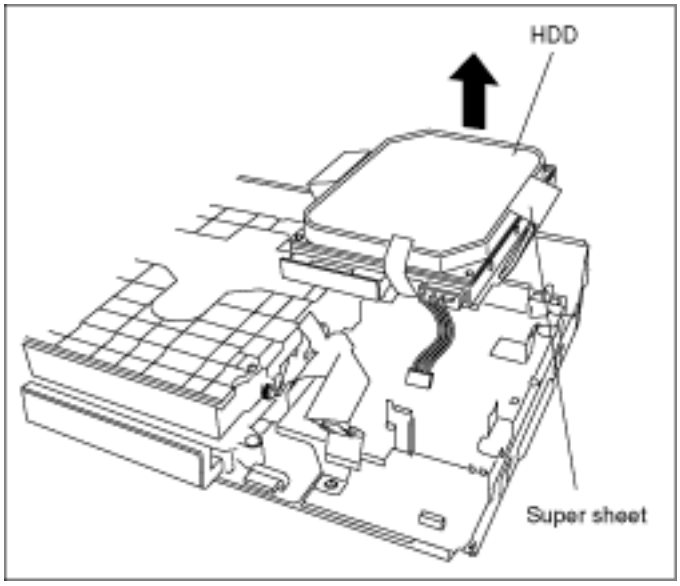
1. Remove 3 Screws (A) and 2 connectors.

2. Slide and lift up HDD Holder in the direction of the arrows so to unlock 3 locking tabs.




3. Lift up HDD with super sheet vertically and remove super sheet.



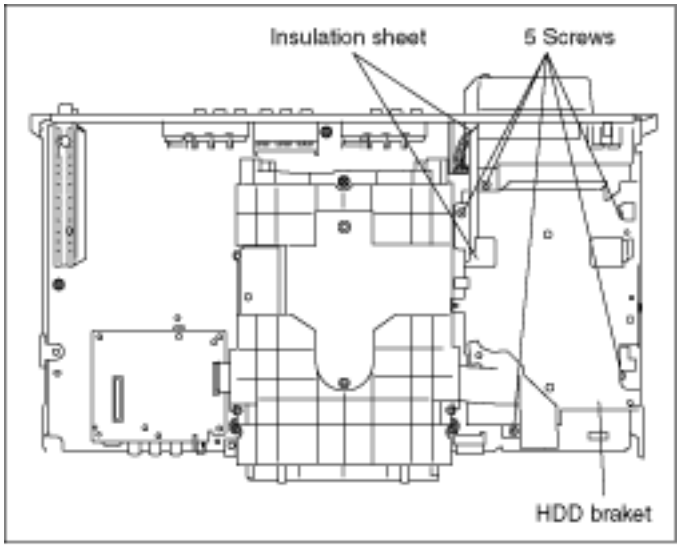

| Handling of HDD |
| --- |
| The following precautions should be taken when handling HDD. |
| A. Never give an impact to HDD. (Even a drop from 1cm height can be a cause of HDD failure.<br>B. When placing HDD on a workbench, provide a mat on a bench for shock absorption and anti-static purposes.<br>C. When installing HDD, release it from your hands only after confirming that it is fully set on the chassis.<br>D. Avoid stacking up HDD.<br>E. HDD is unstable and easy to fall. Do not stand it on its side face.<br>F. When handling HDD, hold its side faces to avoid static hazard.<br>G. Do not place HDD on its wrapping bag after removal. (Prevention of static hazard<br>H. Use a screwdriver with low impact and anti-static features. |
| Note:<br>When replacing HDD, please make the rear jumper slave or cable select configuration. |

TOP PREVIOUS NEXT

# 10.11 HDD Bracket



1. Remove 5 screws (B) and HDD Bracket with 2 Insulation Sheets.

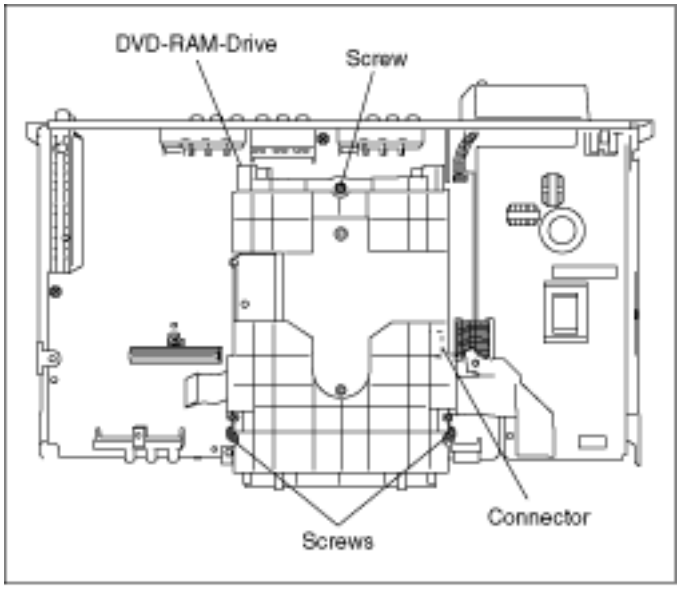


# 10.12 DVD-RAM Drive



1. Remove 3 Screws.

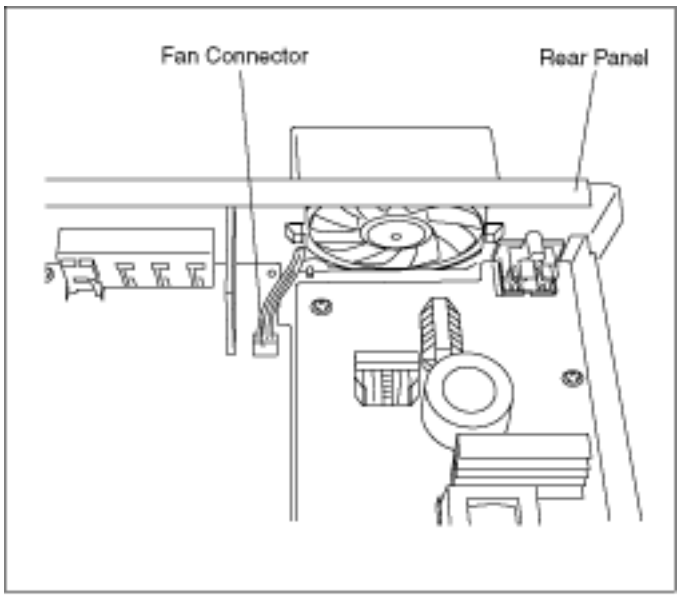
2. Pull out DVD-RAM Drive vertically so to remove it with Connector.



# 10.13 Rear Panel

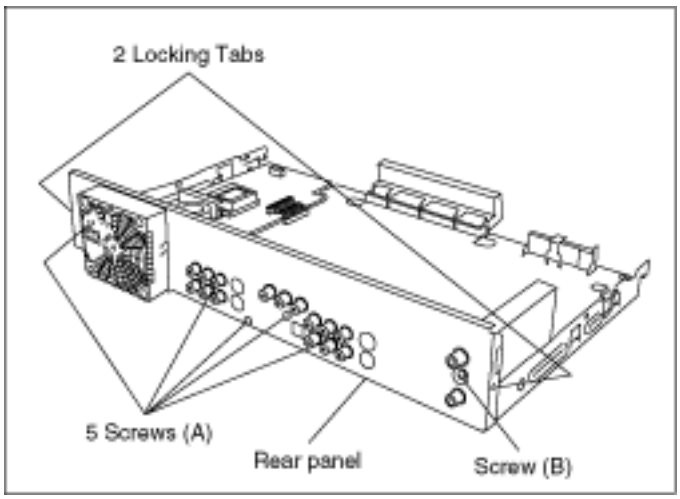


1. Remove the Fan Connector.




2. Remove the 5 screws (A) and screw (B).

3. Unlock 2 Locking Tabs to remove Rear Panel.

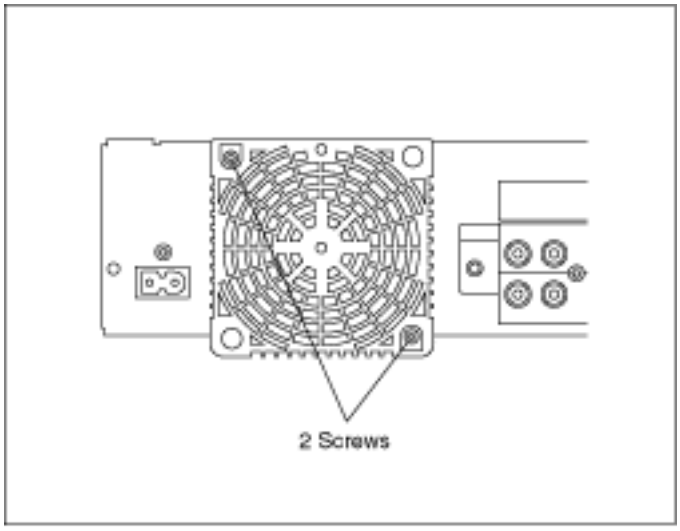



10.13.1 Only Fan Motor

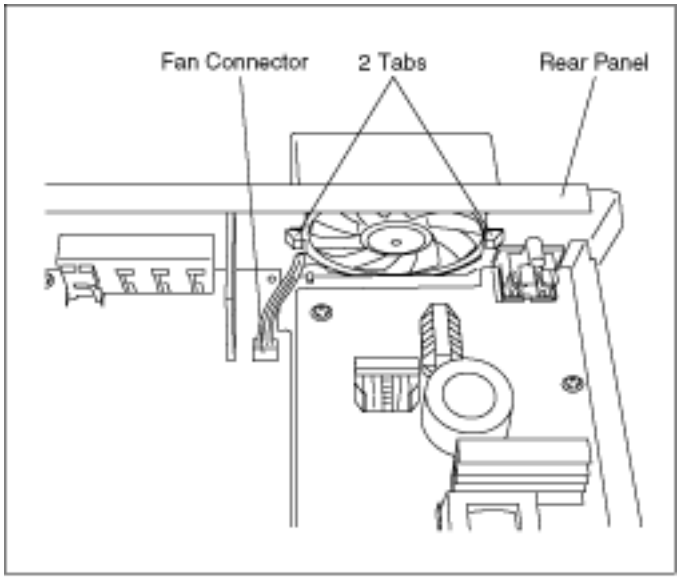
# 10.13.1 Only Fan Motor



1. Remove the 2 screws.



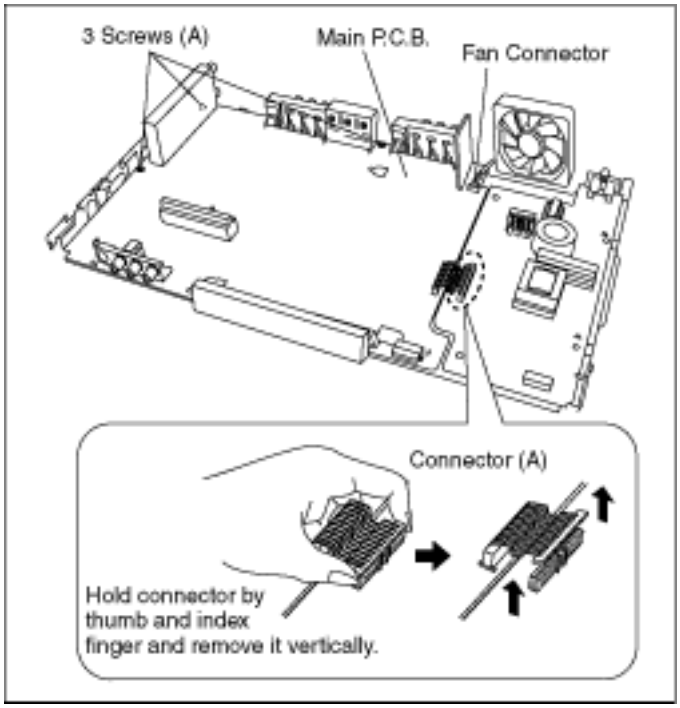

2. Remove Fan Connector and 2 Tabs to remove Fan Motor.



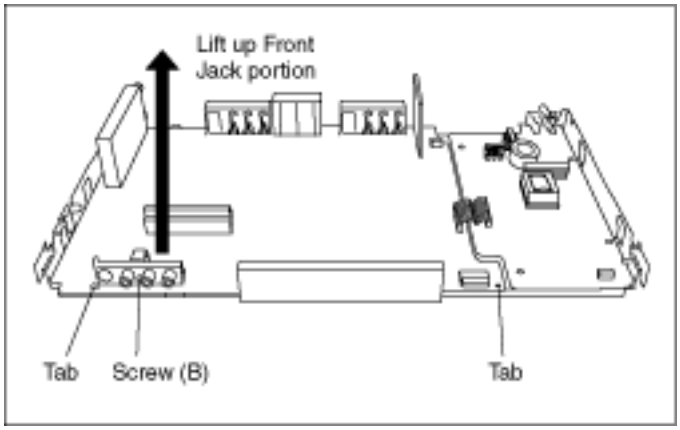
# 10.14 Main P.C.B.



1. Remove the 3 screws (A), Connector (A) and Fan Connector.




2. Remove a Screw (B) and lift up Front Jack portion of Main P.C.B. slightly so to unlock Tab to remove Main P.C.B..

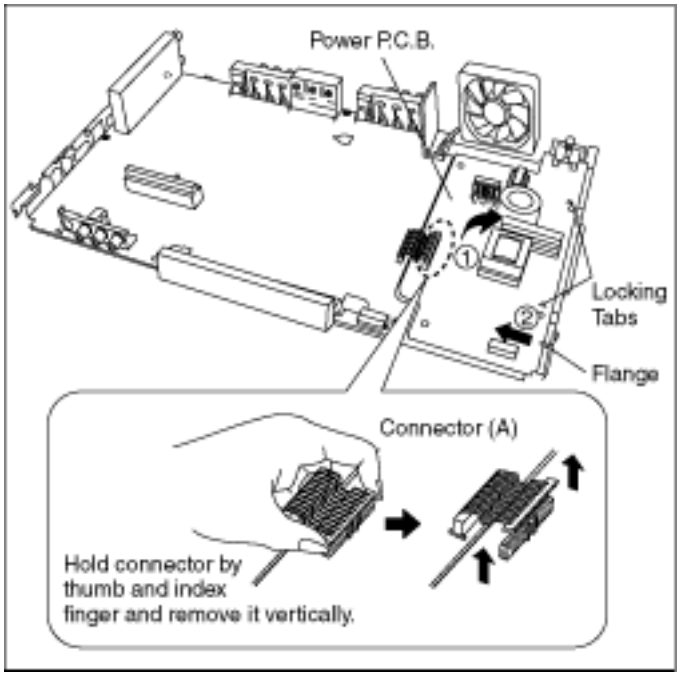


# 10.15 Power P.C.B.

TOP PREVIOUS NEXT

1. Remove Connector (A).

2. Lift up Power P.C.B. a little so to unlock 2 Tabs and slide Power P.C.B. so to unlock Flange to remove Power P.C.B.

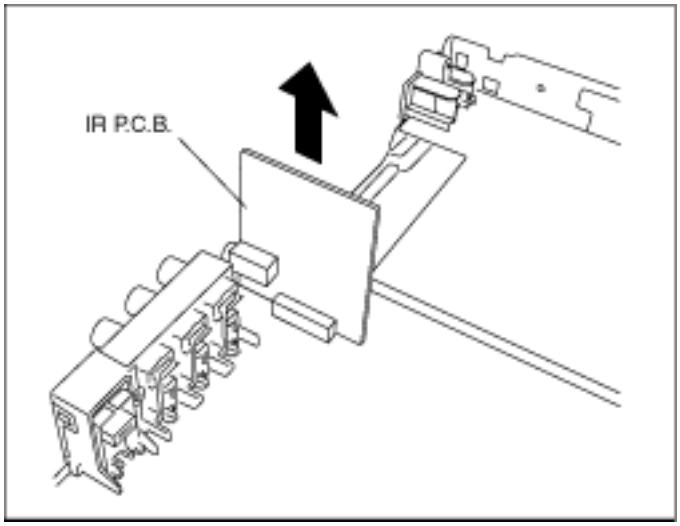



TOP PREVIOUS NEXT

# 10.16 IR P.C.B.



1. Pull out IR P.C.B. in the direction of the arrow.



# 11 Service Fixture and Tools



| Part Number | Description | Compatibility |
|---|---|---|
| RFKZ0125 | Extension FFC (Digital P.C.B. - DVD-RAM Drive / 40 Pin) | Same as E50 series |
| RFKZ0168 | Extension Cable (Main P.C.B. - Fan / 3 Pin) | Same as E50 series |
| RFKZ0169 | Extension Cable (Power P.C.B. - HDD / 4 Pin) | Same as E100H series |
| RFKZ0181 | Extension Cable (Digital P.C.B. - SD & PC Card P.C.B. / 70 Pin) | Same as E100H series |
| RFKZ0197 | Extension Cable (Main P.C.B. - DVD-RAM Drive / 8 Pin) | Same as E55 series |
| RFKZ0214 | Extension Cable (MainP.C.B. - Digital P.C.B. / 88 Pin) | Same as E55 series |
| RFKZ0215 | Extension Cable (MainP.C.B. - Front (R) P.C.B. / 12 Pin) | Same as E55 series |
| RFKZ0216 | Extension Cable (MainP.C.B. - Power P.C.B. / 23 Pin) | Same as E55 series |

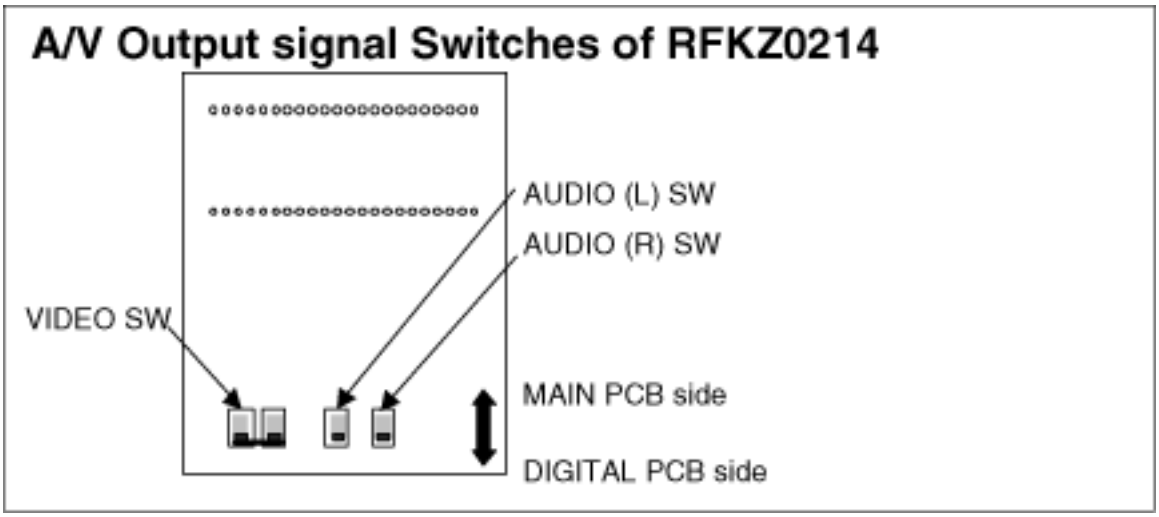
NOTE:

Extension Cable RFKZ0214 has A/V Output Signal switches.

Output signals can be switched from MAIN PCB side or DIGITAL PCB side.

When check MAIN PCB, turn switches to MAIN PCB side.

When check DIGITAL PCB, turn switches to DIGITAL P.C.B. side.



# 12 Service Positions

TOP PREVIOUS NEXT

Note:

For description of the disassembling procedure, see the section 10.

12.1 Checking and Repairing of Power P.C.B.

12.2 Checking and Repairing of Main P.C.B.

12.3 Checking and Repairing of Digital P.C.B.

12.4 Checking and Repairing of DVD-RAM Drive

12.5 Checking and Repairing of HDD

12.6 Checking and Repairing of SD & PC Card P.C.B.

12.7 Checking of IR P.C.B.

TOP PREVIOUS NEXT

# 12.1 Checking and Repairing of Power P.C.B.

TOP PREVIOUS NEXT

**1. Top Case**

- Remove 2 Screws (A) on side
- Remove 3 rear Screws (B) on rear
- Remove Top Case

**2. Front Panel**

- Unlock 2 Locking Tabs on side
- Unlock 3 Locking Tabs on bottom
- Remove Front Panel

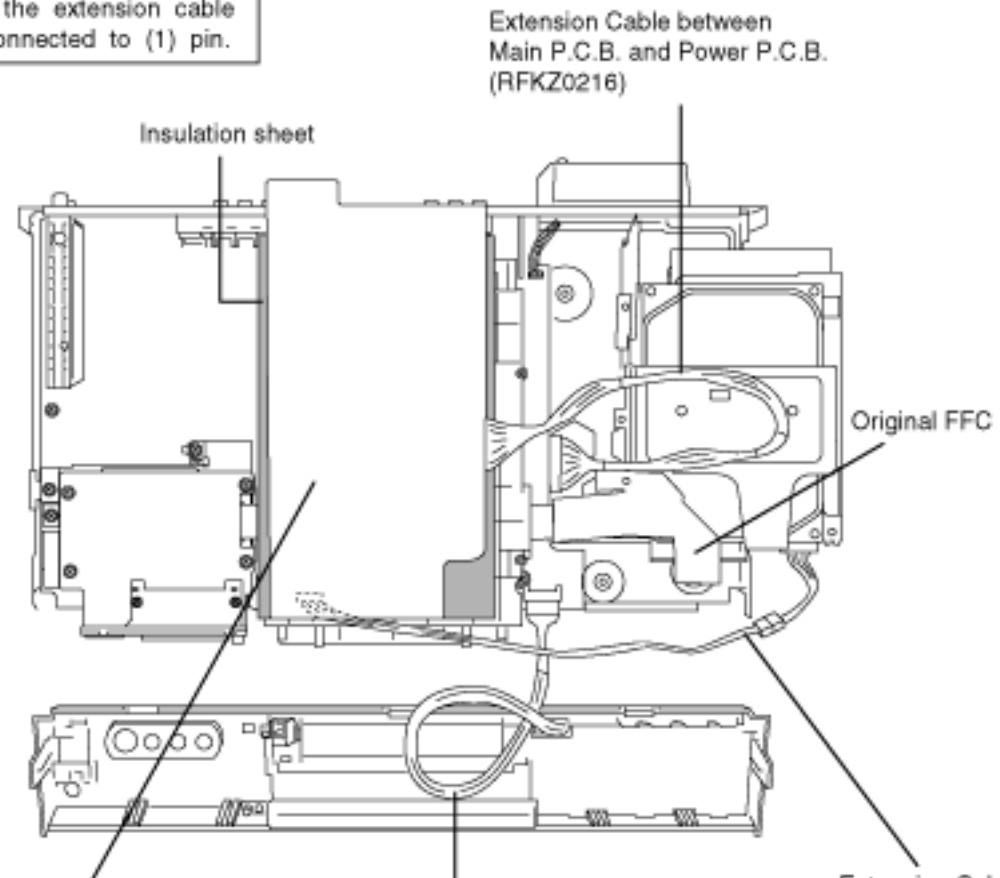
**3. HDD & HDD Braket**

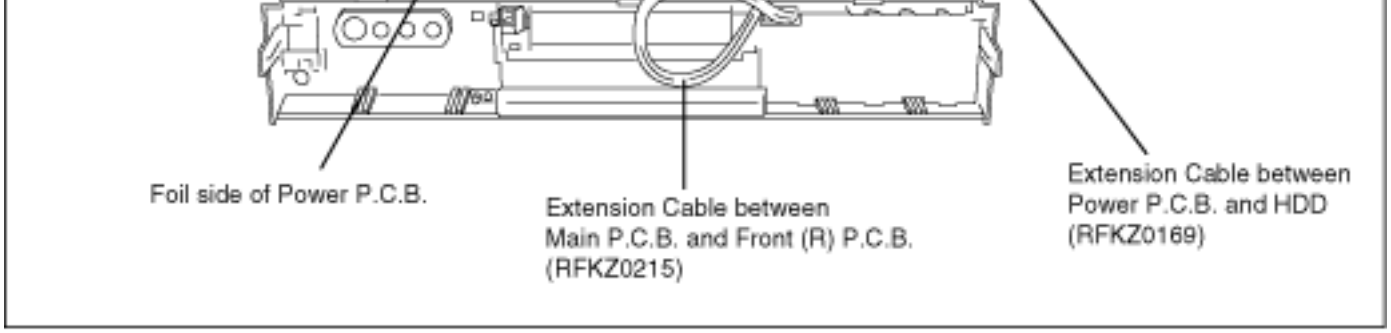
- Remove one Screw fixing RAM Drive -HDD FFC
- Disconnect 2 Connectors
- Remove 4 Screws fixing HDD Braket
- Lift up HDD Braket with HDD

**4. Power P.C.B.**

- Remove 1 Screw for AC Inlet fixing
- Remove Connector to Main P.C.B.
- Unlock 2 Locking Tabs and a Flange
- Remove Power P.C.B.
- Connect Extension Cables between Main P.C.B. and Power P.C.B. (RFKZ0216), and between Main P.C.B. and Front (R) P.C.B. (RFKZ0215), and between Power P.C.B. and HDD (RFKZ0169), and between DVD-RAM Drive and HDD (Original FFC)
- Put Power P.C.B. on insulation sheet so that it's foil side faces top.

**Caution:**
Red wire in the extension cable should be connected to (1) pin.




Foil side of Power P.C.B.
Extension Cable between
Main P.C.B. and Front (R) P.C.B.
(RFKZ0215)
Extension Cable between
Power P.C.B. and HDD
(RFKZ0169)

# 12.2 Checking and Repairing of Main P.C.B.



**1. Top Case**

- Remove 2 Screws (A) on side
- Remove 3 rear Screws (B) on rear
- Remove Top Case

**2. Front Panel**

- Unlock 2 Locking Tabs on side
- Unlock 3 Locking Tabs on bottom
- Remove Front Panel

**3. Rear Panel**

- Remove 5 Screws(A) and Screw(B)
- Remove Fan Connector
- Unlock 2 Locking Tabs on side
- Remove Rear Panel with FAN

**4. HDD & HDD Braket**

- Remove one Screw fixing RAM Drive-HDD FFC
- Disconnect 2 Connectors
- Remove 4 Screws fixing HDD Braket
- Lift up HDD Braket with HDD

**5. DVD-RAM Drive**

- Remove FFC to Digital P.C.B.
- Remove 3 Screws fixing RAM-Drive
- Lift up DVD-RAM Drive to remove it

**6. SD & PC Card P.C.B.**

- Remove the 4 Screws fixing SD & PC Card P.C.B. .
- Pull out the SD & PC Card P.C.B. vertically.

**7. SD & PC Card P.C.B. angle**

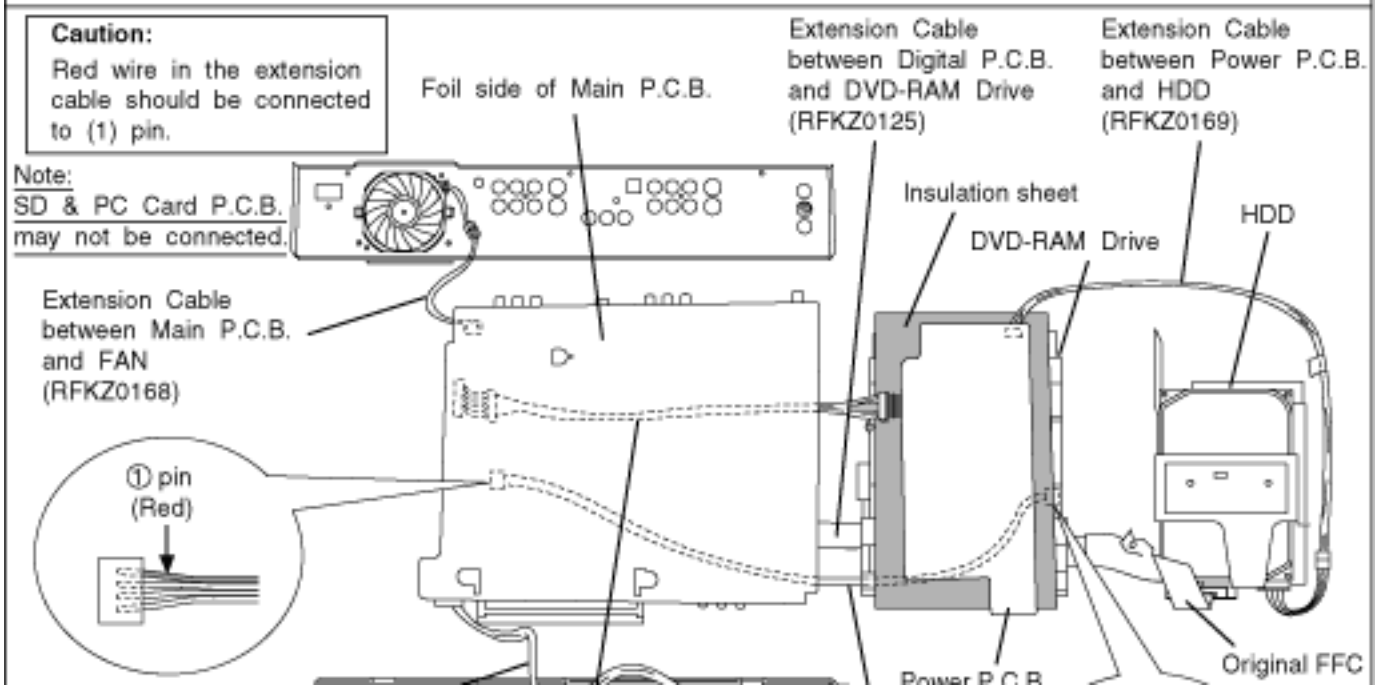
- Remove one Screw fixing DV Jack section.
- Remove the 5 Screws fixing SD & PC Card P.C.B. angle.
- Remove the SD & PC Card P.C.B. angle vertically.

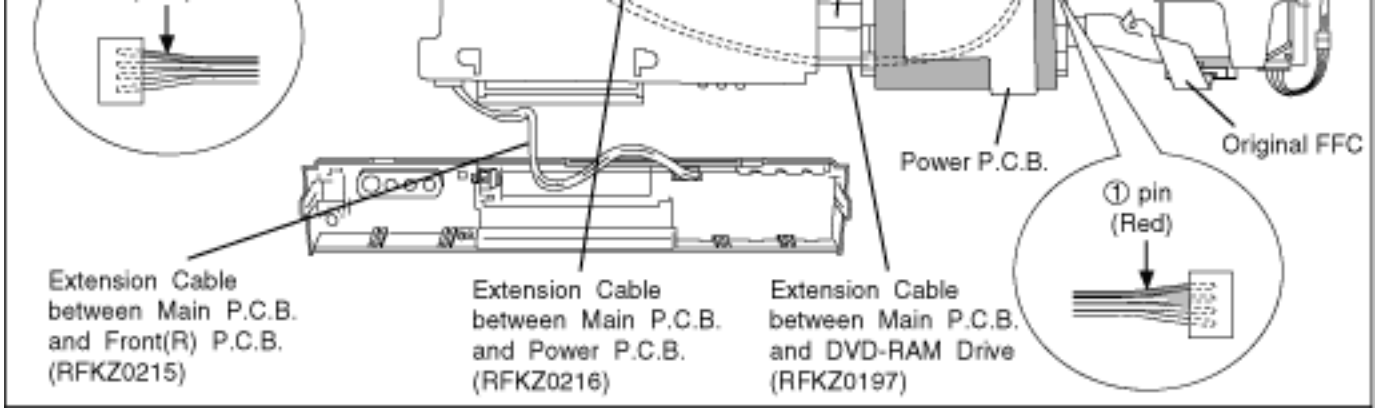
**8. Main P.C.B. and Power P.C.B.**

- Disconnect Connector between Main P.C.B. and Power P.C.B.
- Remove 3 Screws (A) and Screws (B) fixing Main P.C.B.
- Unlock 2 Locking Tabs for Power P.C.B.
- Remove a Flange for Power P.C.B.

Remove Main P.C.B. and Power P.C.B. from Chassis, and put Main P.C.B. so that it's foil side faces top.Put Insulation Sheet on DVD-RAM Drive, then place Power P.C.B. on Insulation Sheet

Connect Extension Cables between Main P.C.B. and Front P.C.B. (RFKZ0215), between Main P.C.B. and Power P.C.B. (RFKZ0216), and between Main P.C.B. and DVD-RAM Drive (RFKZ0197) , and between Digital P.C.B. and DVD-RAM Drive (RFKZ0125), and between Main P.C.B. and Fan (RFKZ0168), and between Power P.C.B. and HDD (RFKZ0169), and between DVD-RAM Drive and HDD (Original FFC)






TOP PREVIOUS NEXT

# 12.3 Checking and Repairing of Digital P.C.B.



**1. Top Case**

- Remove 2 Screws (A) on side
- Remove 3 rear Screws (B) on rear
- Remove Top Case

**2. Front Panel**

- Unlock 2 Locking Tabs on side.
- Unlock 3 Locking Tabs on bottom.
- Remove Front Panel

**3. SD & PC Card P.C.B.**

- Remove the 4 Screws fixing SD & PC Card P.C.B. .
- Pull out the SD & PC Card P.C.B. vertically.

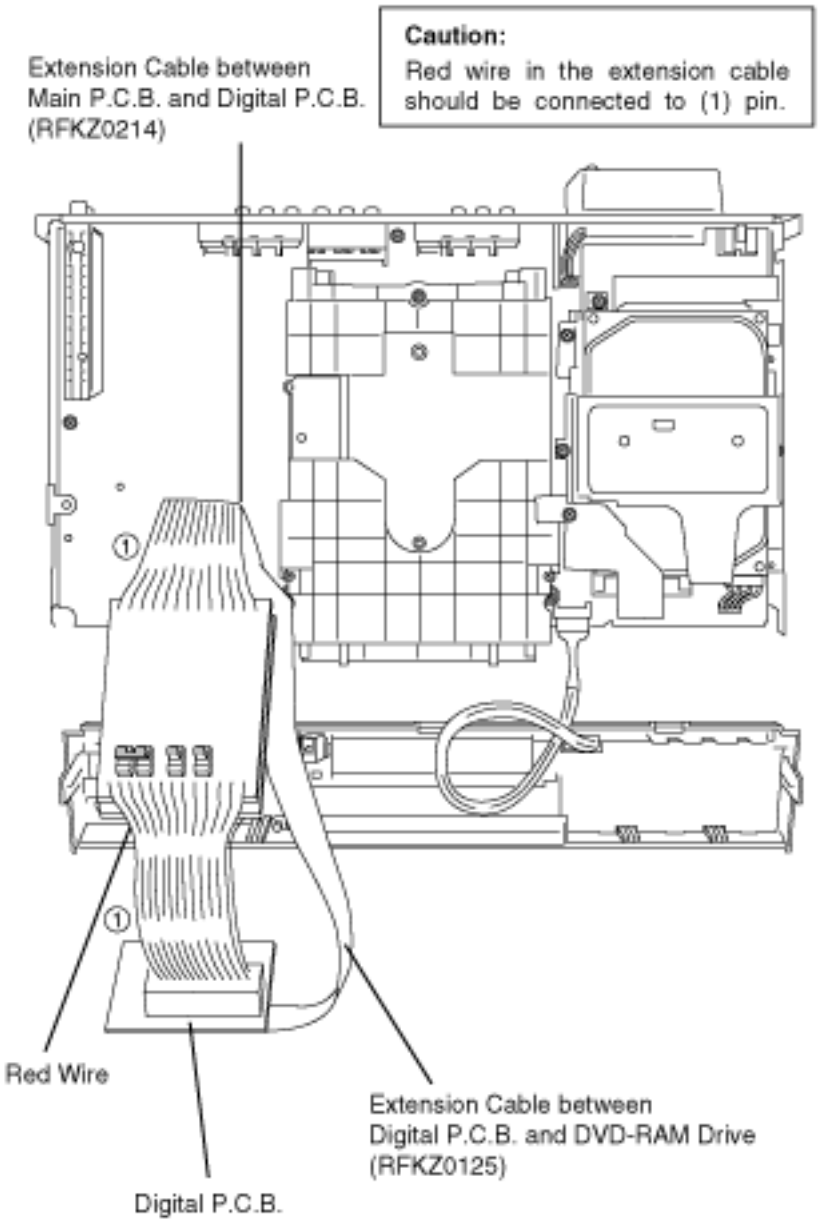
**4. SD & PC Card P.C.B. angle**

- Remove one Screw fixing DV Jack section.
- Remove the 5 Screws fixing SD & PC Card P.C.B. angle.
- Remove the SD & PC Card P.C.B. angle vertically.

**5. Digital P.C.B. with DV Jack P.C.B.**

- Remove FFC to RAM-Drive
- Remove a Rocking spacer.
- Lift up Digital P.C.B. to remove it

Connect Extension Cables between Main P.C.B. and Digital P.C.B. (RFKZ0214), and between Digital P.C.B. and DVD-RAM Drive (RFKZ0125), and between Main P.C.B. and Front (R) P.C.B. (RFKZ0215)




Note: SD & PC Card P.C.B. may not be connected.

# 12.4 Checking and Repairing of DVD-RAM Drive



**1. Top Case**

- Remove 2 Screws (A) on side
- Remove 3 rear Screws (B) on rear
- Remove Top Case

**2. Front Panel**

- Unlock 2 Locking Tabs on side
- Unlock 3 Locking Tabs on bottom
- Remove Front Panel

**3. SD & PC Card P.C.B.**

- Remove the 4 Screws fixing SD & PC Card P.C.B. .
- Pull out the SD & PC Card P.C.B. vertically.

**4. SD & PC Card angle**

- Remove the 5 Screws fixing SD & PC Card P.C.B. angle.
- Remove the SD & PC Card P.C.B. angle vertically

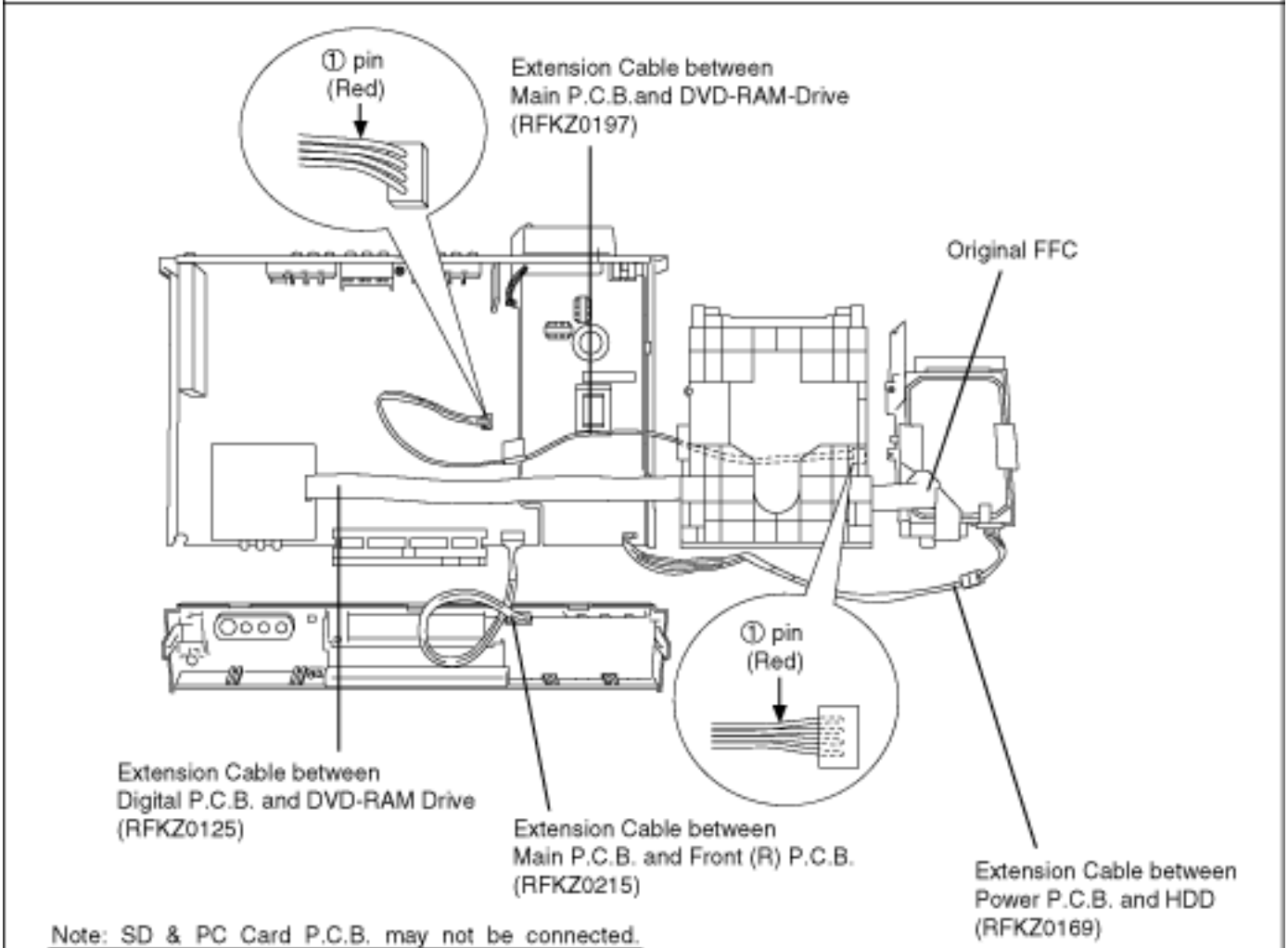
**5. HDD**

- Remove one Screw
- Disconnect 2 Connectors
- Remove 4 Screws fixing HDD Braket
- Lift up HDD Braket with HDD

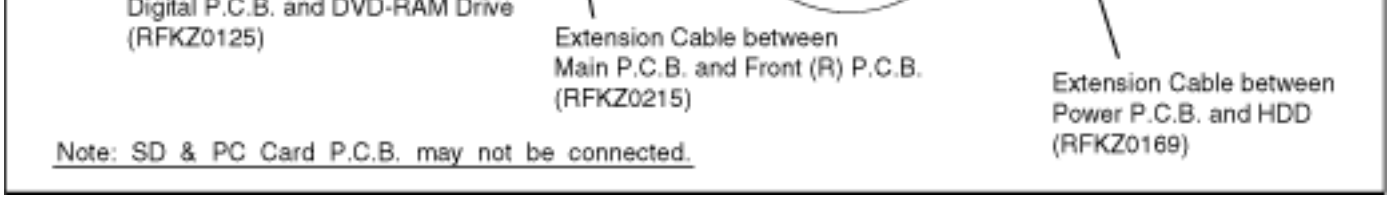
**6. DVD-RAM Drive**

- Remove 3 Screws fixing RAM Drive
- Remove FFC to Digital P.C.B.
- Lift up DVD-RAM Drive to remove it

Connect Extension Cables between Main P.C.B. and DVD-RAM Drive (RFKZ0197), between Digital P.C.B. and DVD-RAM Drive (RFKZ0125), and between Main P.C.B. and Front (R) P.C.B. (RFKZ0215), between Power P.C.B. and HDD (RFKZ0169), and between DVD-RAM Drive and HDD (Original FFC)




Note: SD & PC Card P.C.B. may not be connected.


Digital P.C.B. and DVD-RAM Drive
(RFKZ0125)
Extension Cable between
Main P.C.B. and Front (R) P.C.B.
(RFKZ0215)
Extension Cable between
Power P.C.B. and HDD
(RFKZ0169)
Note: SD & PC Card P.C.B. may not be connected.

# 12.5 Checking and Repairing of HDD



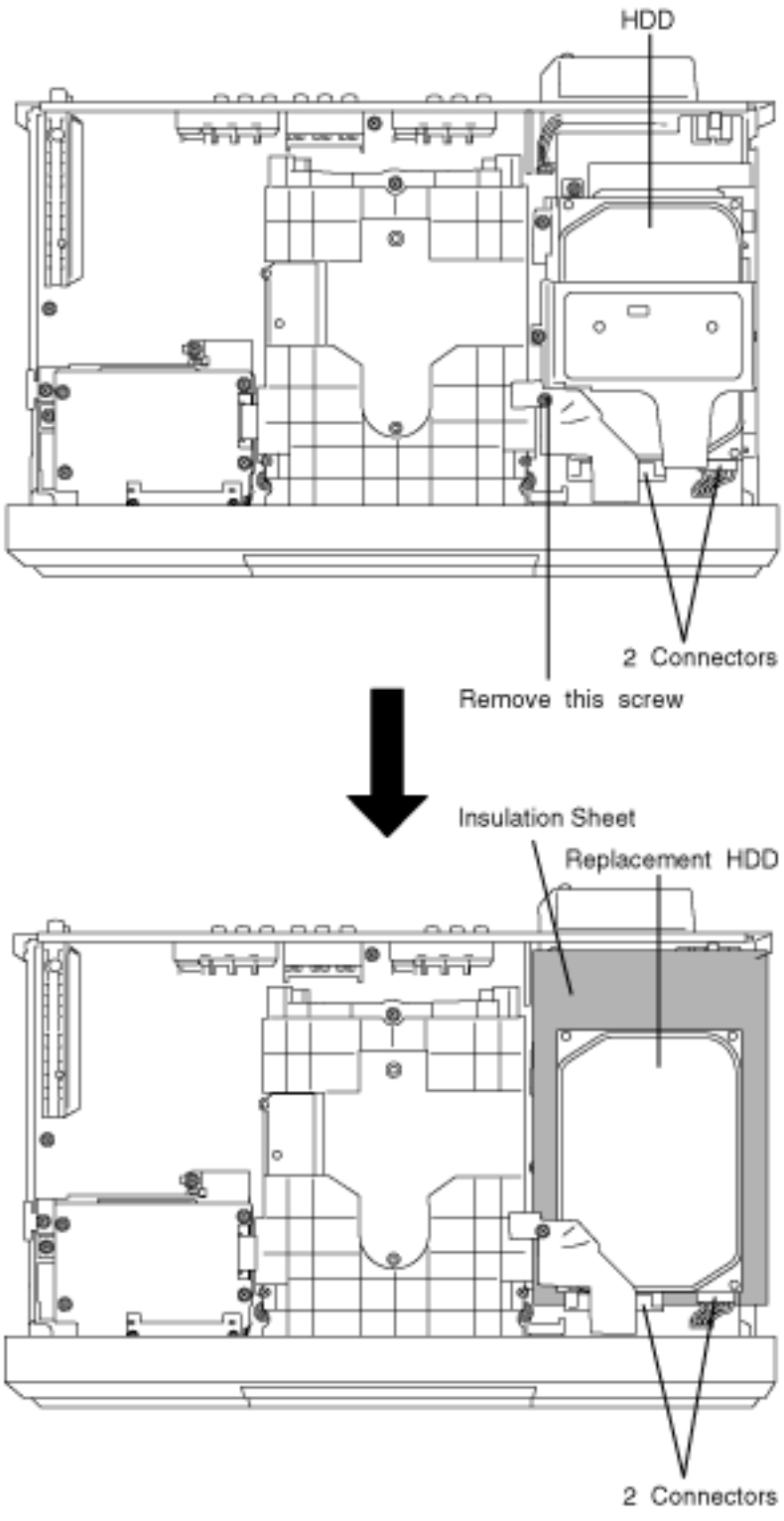
**1. Top Case**

Remove 2 Screws (A) on side

Remove 3 rear Screws (B).

Remove Top Case

(1) Remove one Screw fixing RAM Drive-HDD FFC
(2) Disconnect 2 Connectors
(3) Put a Insulation Sheet on HDD
(4) Put Replacement HDD on the Insulation Sheet
(5) Connect 2 Connectors to Replacement HDD



# 12.6 Checking and Repairing of SD& PC Card P.C.B.



**1. Top Case**

- Remove 2 Screws (A) on side
- Remove 3 rear Screws (B)
- Remove Top Case

**2. Front Panel**

- Unlock 2 Locking Tabs on side
- Unlock 3 Locking Tabs on bottom
- Remove Front Panel

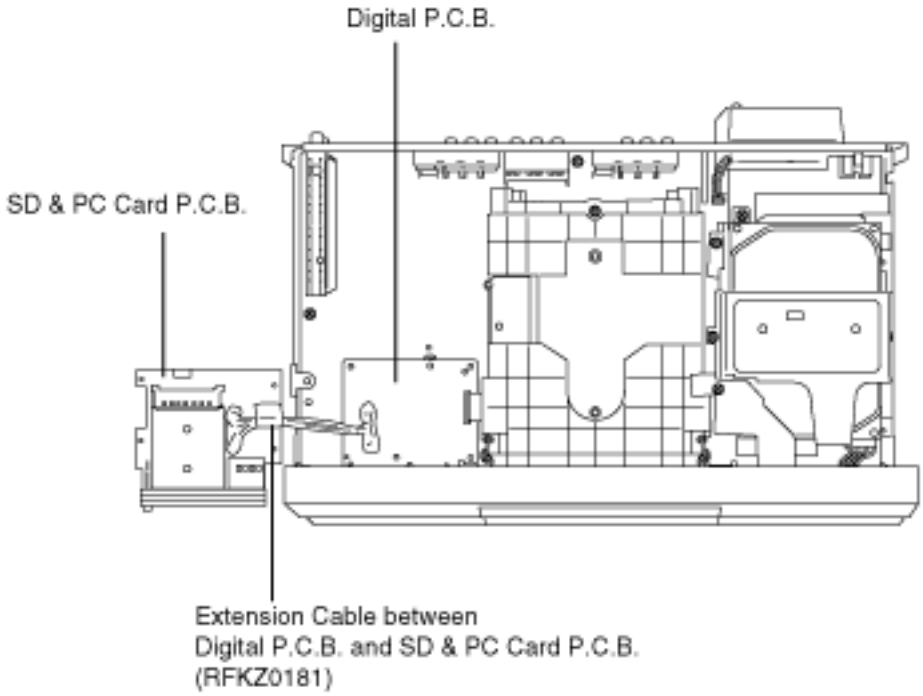
**3. SD & PC Card P.C.B.**

- Remove the 4 Screws fixing SD & PC Card P.C.B.
- Pull out the SD & PC Card P.C.B. Card vertically.

**4. SD & PC Card P.C.B.angle**

- Remove one Screw fixing DV Jack section.
- Remove the 5 Screws fixing SD & PC Card P.C.B. angle.
- Remove the SD & PC Card P.C.B. angle vertically.

Attach the Front Panel and connect Extension Cable between Digital P.C.B. and SD & PC Card P.C.B. (RFKZ0181).



# 12.7 Checking of IR P.C.B.



**1. Top Case**

Remove 2 Screws (A) and 3 Screws (B).

Remove Top Case.

**2. Rear Panel**

Remove 5 Screws (A) and one Screw (B).

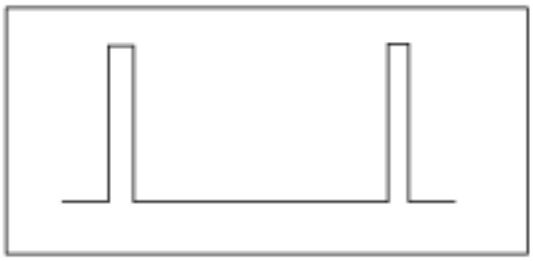
Unlock 2 Locking Tabs to remove Rear Panel.

Connect TV Monitor.

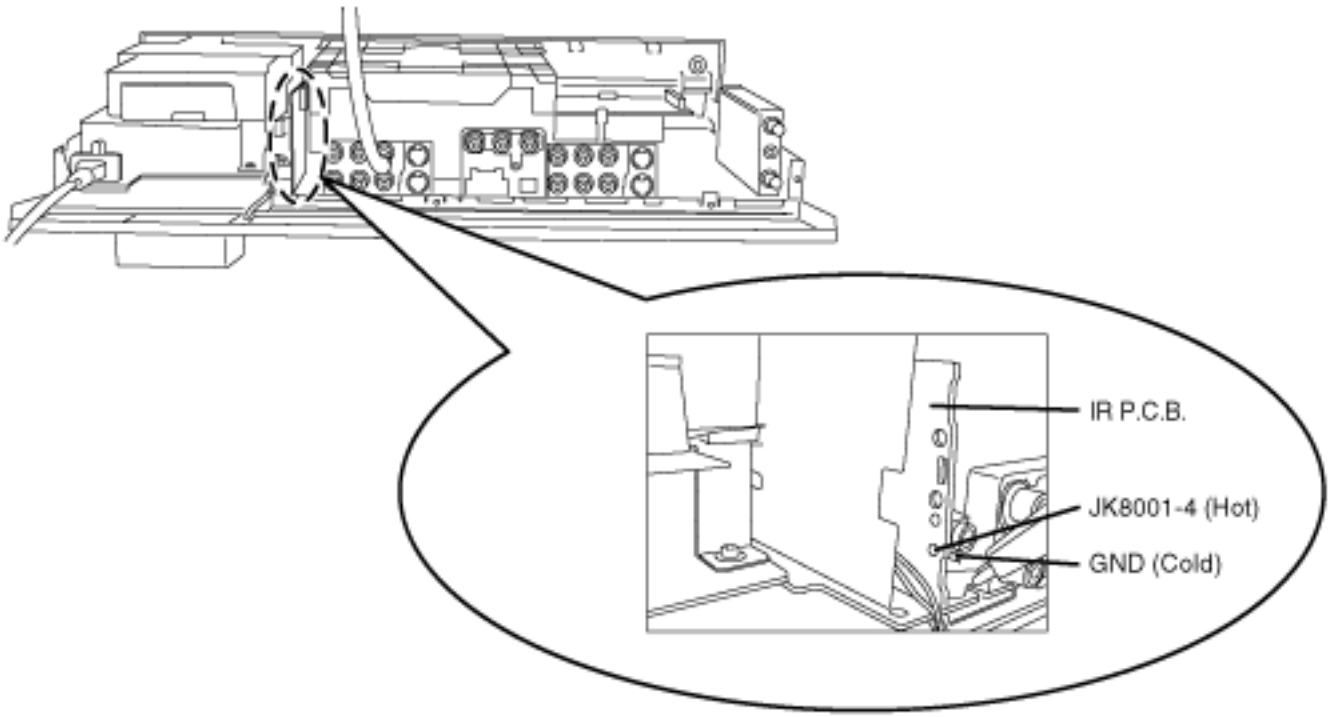
Connect Oscilloscope to JK9001-4 (Hot) and GND.

## Checking Procedure:

1. Turn on the power. Then if "Welcome ..." was displayed on the TV monitor, press [ENTER] to advance next stage. Then press [ENTER] and proceed to step 6.
   (*After "EPG" has been set up, this indication will not appear.)
2. Press [FUNCTIONS].
3. Select "**SET UP**", and press [ENTER].
4. Select "**TV GUIDE Setting**" of the channel menu, and then press [ENTER].
5. Select "**No, repeat setup process**", and then press [ENTER].
6. Select "**USA**", and then press [ENTER].
7. Input "**0 2 0 3 2**", and then press [ENTER].
8. Select "Yes", and then press [ENTER].
9. Select "Yes", and then press [ENTER].
10. Select "L3", and then press [ENTER].
11. Press [ENTER].
12. Select "**Not Listed**", and then press [ENTER].
13. Press [ENTER], and then if the P.C.B. is "OK", pulse signals of approx. 4.5Vp-p are output twice from JK8001-4. (When you want to check again, select "**Test this code again**" and press [ENTER], then Pulse signals are output again.



*Recommended ranges of the Oscilloscope:
V: DC range, and 1V/div.
T: 1msec./div.



# 13 Adjustment Procedures

TOP PREVIOUS NEXT

13.1 After replacing the RAM Drive with new one

13.2 When the unit does not operate normally after replacing the Timer Microprocessor with new one

TOP PREVIOUS NEXT

# 13.1 After replacing the RAM Drive with new one



After replacing of RAM drive unit, TEST mode is not necessary. Please confirm operation for RAM drive

## Caution:

In this case, all parameters are initialized.

# 13.2 When the unit does not operate normally after replacing the Timer Microprocessor with new one



in order to transmit the

| Step | Operation | Descriptions |
|---|---|---|
| 1 | While power is ON, short IC7503-1 pin (RESET) and the GND. | RESET (L) is transmitted to the reset terminal of Timer Microprocessor (IC7501-80 pin), then the unit operates normally. |

# 14 Standard Inspection Specifications after Making Repairs

TOP PREVIOUS NEXT

After making repairs, we recommend performing the following inspection, to check normal operation.

| No. | Procedure | Item to Check |
|---|---|---|
| 1 | Turn on the power, and confirm items pointed out. | Items pointed out should reappear. |
| 2 | Insert RAM disc. | The Panasonic RAM disc should be recognized. |
| 3 | Enter the EE (TU IN / AV IN - AV OUT) mode. | No abnormality should be seen in the picture, sound or operation. |
| 4 | Perform auto recording and playback for one minute using the RAM disc. | No abnormality should be seen in the picture, sound or operation. |
| 5 | Model with the HDD : Perform auto recording and playback for one minute using the HDD | No abnormality should be seen in the picture, sound or operation.<br>*Panasonic DVD-R disc should be used when recording and playback. |
| 6 | If a problem is caused by a VCD, DVD-R, DVD-Video, Audio-CD, or MP3, playback the test disc. | No abnormality should be seen in the picture, sound or operation. |
| 7 | After checking and making repairs, upgrade the firmware to the latest version. | Make sure that [FIRM_SUCCESS] appears in the FL displays.<br>*[UNSUPPORT] display means the unit is already updated to newest same version. Then version up is not necessary. |
| 8 | Transfer [9][9] in the service mode setting, and initialize the service settings (return various settings and error information to their default values. The laser time is not included in this initialization). | Make sure that [CLR SERV] appears in the FL display.<br>After checking it, turn the power off. |
| 9 | When replacing of RAM drive, transfer [9] [5] in the service mode setting to delete Laser used time. | Make sure that [CLR LASER] appears in the FL display.<br>After that, turn power off. |
| 10 | In case of that the trouble is caused by SD/PC card and/or DV terminal. | 1) SD/PC card: Check to be able to display and copy the picture.<br>2) DV terminal: Check to be able to record from DVC. |

Use the following checklist to establish the judgement criteria for the picture and sound.

| Item | Contents | Check | Item | Contents | Check |
|---|---|---|---|---|---|
| Picture | Block noise | | Sound | Distorted sound | |
| | Crosscut noise | | | Noise (static, background noise, etc.) | |
| | Dot noise | | | The sound level is too low. | |
| | Picture disruption | | | The sound level is too high. | |
| | Not bright enough | | | The sound level changes. | |
| | Too bright | | | | |
| | Flickering color | | | | |
| | Color fading | | | | |

# 15 Voltage and Waveform Chart

TOP PREVIOUS NEXT

Note)

Circuit voltage and waveform described herein shall be regarded as reference information when probing defect point, because it may differ from an actual measuring value due to difference of Measuring instrument and its measuring condition and product itself.

15.1 Power P.C.B.

15.2 Main P.C.B.

15.3 SD & PC Card P.C.B.

15.4 IR P.C.B.

15.5 Front (R) P.C.B.

15.6 P9001 Connector

15.7 Waveform Chart

TOP PREVIOUS NEXT

# 15.1 Power P.C.B.





# 15.2 Main P.C.B.









# 15.3 SD& PC Card P.C.B.





# 15.4 IR P.C.B.





# 15.5 Front (R) P.C.B.





# 15.6 P9001 Connector





# 15.7 Waveform Chart





# 16 Abbreviations



| INITIAL/LOGO | | ABBREVIATIONS |
|---|---|---|
| A | A0~UP | ADDRESS |
| | ACLK | AUDIO CLOCK |
| | AD0~UP | ADDRESS BUS |
| | ADATA | AUDIO PES PACKET DATA |
| | ALE | ADDRESS LATCH ENABLE |
| | AMUTE | AUDIO MUTE |
| | AREQ | AUDIO PES PACKET REQUEST |
| | ARF | AUDIO RF |
| | ASI | SERVO AMP INVERTED INPUT |
| | ASO | SERVO AMPOUTPUT |
| | ASYNC | AUDIO WORD DISTINCTION SYNC |
| B | BCK | BIT CLOCK (PCM) |
| | BCKIN | BIT CLOCK INPUT |
| | BDO | BLACK DROP OUT |
| | BLKCK | SUB CODE BLOCK CLOCK |
| | BOTTOM | CAP. FOR BOTTOM HOLD |
| | BYP | BYPATH |
| | BYTCK | BYTE CLOCK |
| C | CAV | CONSTANT ANGULAR VELOCITY |
| | CBDO | CAP. BLACK DROP OUT |
| | CD | COMPACT DISC |
| | CDSCK | CD SERIAL DATA CLOCK |
| | CDSRDATA | CD SERIAL DATA |
| | CDRF | CD RF (EFM) SIGNAL |
| | CDV | COMPACT DISC-VIDEO |
| | CHNDATA | CHANNEL DATA |
| | CKSL | SYSTEM CLOCKSELECT |
| | CLV | CONSTANT LINEAR VELOCITY |
| | COFTR | CAP. OFF TRACK |
| | CPA | CPU ADDRESS |
| | CPCS | CPU CHIP SELECT |
| | CPDT | CPU DATA |
| | CPUADR | CPU ADDRESS LATCH |
| | CPUADT | CPU ADDRESS DATA BUS |
| | CPUIRQ | CPU INTERRUPT REQUEST |
| | CPRD | CPU READ ENABLE |
| | CPWR | CPU WRITE ENABLE |
| | CS | CHIPSELECT |
| | CSYNCIN | COMPOSITE SYNC IN |
| | CSYNCOUT | COMPOSITE SYNC OUT |

| | | |
|---|---|---|
| D | DACCK | D/A CONVERTER CLOCK |
| | DEEMP | DEEMPHASIS BIT ON/OFF |
| | DEMPH | DEEMPHASIS SWITCHING |
| | DIG0~UP | FL DIGIT OUTPUT |
| | DIN | DATA INPUT |
| | DMSRCK | DM SERIAL DATA READ CLOCK |
| | DMUTE | DIGITAL MUTE CONTROL |
| | DO | DROP OUT |
| | DOUT0~UP | DATAOUTPUT |
| | DRF | DATA SLICE RF (BIAS) |
| | DRPOUT | DROP OUT SIGNAL |
| | DREQ | DATA REQUEST |
| | DRESP | DATA RESPONSE |
| | DSC | DIGITAL SERVO CONTROLLER |
| | DSLF | DATA SLICE LOOP FILTER |
| | DVD | DIGITAL VIDEO DISC |

| INITIAL/LOGO | | ABBREVIATIONS |
|---|---|---|
| E | EC | ERROR TORQUE CONTROL |
| | ECR | ERROR TORQUE CONTROL REFERENCE |
| | | ENCODER SELECT |
| | ENCSEL | EXTERNAL M CLOCK (81MHz/40.5MHz) |
| | ETMCLK | EXTERNAL S CLOCK (54MHz) |
| | ETSCLK | |
| F | FBAL | FOCUS BALANCE |
| | FCLK | FRAME CLOCK |
| | FE | FOCUS ERROR |
| | FFI | FOCUS ERROR AMP INVERTED INPUT |
| | FEO | FOCUS ERROR AMP OUTPUT |
| | FG | FREQUENCY GENERATOR |
| | FSC | FREQUENCY SUB CARRIER |
| | FSCK | FS (384 OVER SAMPLING) CLOCK |
| G | GND | COMMON GROUNDING (EARTH) |
| H | HA0~UP | HOST ADDRESS |
| | HD0~UP | HOST DATA |
| | HINT | HOST INTERRUPT |
| | HRXW | HOST READ/WRITE |
| I | IECOUT | IEC958 FORMAT DATA OUTPUT |
| | IPFRAG | INTERPOLATION FLAG |
| | IREF | I (CURRENT) REFERENCE |
| | ISEL | INTERFACE MODE SELECT |
| L | LDON | LASER DIODE CONTROL |
| | LPC | LASER POWER CONTROL |
| | LRCK | L CH/R CH DISTINCTION CLOCK |
| M | MA0~UP | MEMORY ADDRESS |
| | MCK | MEMORY CLOCK |
| | MCKI | MEMORY CLOCK INPUT |
| | MCLK | MEMORY SERIAL COMMAND CLOCK |
| | MDATA | MEMORY SERIAL COMMAND DATA |
| | MDQ0~UP | MEMORY DATA INPUT/OUTPUT |
| | MDQM | MEMORY DATA I/O MASK |
| | MLD | MEMORYSERIAL COMMAND LOAD |
| | MPEG | MOVING PICTURE EXPERTS GROUP |

| | | |
|---|---|---|
| O | ODC | OPTICAL DISC CONTROLLER |
| | OFTR | OFF TRACKING |
| | OSCI | OSCILLATOR INPUT |
| | OSCO | OSCILLATOR OUTPUT |
| | OSD | ON SCREEN DISPLAY |
| P | P1~UP | PORT |
| | PCD | CD TRACKING PHASE DIFFERENCE |
| | PCK | PLL CLOCK |
| | PDVD | DVD TRACKING PHASE DIFFERENCE |
| | PEAK | CAP. FOR PEAK HOLD |
| | PLLCLK | CHANNEL PLL CLOCK |
| | PLLOK | PLL LOCK |
| | PWMCTL | PWM OUTPUT CONTROL |
| | PWMDA | PULSE WAVE MOTOR DRIVEA |
| | PWMOA, B | PULSE WAVE MOTOR OUT A, B |

| INITIAL/LOGO | | ABBREVIATIONS |
|---|---|---|
| R | RE | READ ENABLE |
| | RFENV | RF ENVELOPE |
| | RFO | RF PHASE DIFFERENCE OUTPUT |
| | RS | (CD-ROM) REGISTER SELECT |
| | RSEL | RF POLARITY SELECT |
| | RST | RESET |
| | RSV | RESERVE |
| S | SBI0, 1 | SERIAL DATA INPUT |
| | SBO0 | SERIAL DATA OUTPUT |
| | SBT0, 1 | SERIAL CLOCK |
| | SCK | SERIAL DATA CLOCK |
| | SCKR | AUDIO SERIAL CLOCK RECEIVER |
| | SCL | SERIAL CLOCK |
| | SCLK | SERIAL CLOCK |
| | SDA | SERIAL DATA |
| | SEG0~UP | FL SEGMENT OUTPUT |
| | SELCLK | SELECTCLOCK |
| | SEN | SERIAL PORT ENABLE |
| | SIN1, 2 | SERIAL DATA IN |
| | SOUT1, 2 | SERIAL DATA OUT |
| | SPDI | SERIAL PORT DATA INPUT |
| | SPDO | SERIAL PORT DATA OUTPUT |
| | SPEN | SERIAL PORT R/W ENABLE |
| | SPRCLK | SERIAL PORT READ CLOCK |
| | SPWCLK | SERIAL PORT WRITE CLOCK |
| | SQCK | SUB CODE Q CLOCK |
| | SQCX | SUBCODE Q DATA READ CLOCK |
| | SRDATA | SERIAL DATA |
| | SRMADR | SRAM ADDRESS BUS |
| | SRMDT0~7 | SRAM DATA BUS 0~7 |
| | SS | START/STOP |
| | STAT | STATUS |
| | STCLK | STREAM DATA CLOCK |
| | STD0~UP | STREAM DATA |
| | STENABLE | STREAM DATA INPUT ENABLE |
| | STSEL | STREAM DATA POLARITY SELECT |
| | STVALID | STREAM DATAVALIDITY |
| | SUBC | SUB CODE SERIAL |
| | SBCK | SUB CODE CLOCK |
| | SUBQ | SUB CODE Q DATA |
| | SYSCLK | SYSTEM CLOCK |

| | | |
|---|---|---|
| T | TE | TRACKING ERROR |
| | TIBAL | BALANCE CONTROL |
| | TID | BALANCE OUTPUT 1 |
| | TIN | BALANCE INPUT |
| | TIP | BALANCE INPUT |
| | TIS | BALANCE OUTPUT 2 |
| | TPSN | OP AMP INPUT |
| | TPSO | OP AMP OUTPUT |
| | TPSP | OP AMP INVERTED INPUT |
| | TRCRS | TRACK CROSSSIGNAL |
| | TRON | TRACKING ON |
| | TRSON | TRAVERSE SERVO ON |

| INITIAL/LOGO | | ABBREVIATIONS |
|---|---|---|
| V | VBLANK | V BLANKING |
| | VCC | COLLECTOR POWER SUPPLY VOLTAGE |
| | VCDCONT | VIDEO CD CONTROL (TRACKING BALANCE) |
| | VDD | DRAIN POWER SUPPLY VOLTAGE |
| | VFB | VIDEO FEED BACK |
| | VREF | VOLTAGE REFERENCE |
| | VSS | SOURCE POWER SUPPLYVOLTAGE |
| W | WAIT | BUS CYCLE WAIT |
| | WDCK | WORD CLOCK |
| | WEH | WRITE ENABLE HIGH |
| | WSR | WORD SELECT RECEIVER |
| X | X | X´ TAL |
| | XALE | X ADDRESS LATCH ENABLE |
| | XAREQ | X AUDIO DATA REQUEST |
| | XCDROM | X CD ROM CHIP SELECT |
| | XCS | X CHIP SELECT |
| | XCSYNC | X COMPOSITE SYNC |
| | XDS | X DATA STROBE |
| | XHSYNCO | X HORIZONTAL SYNC OUTPUT |
| | XHINT | XH INTERRUPTREQUEST |
| | XI | X´ TAL OSCILLATOR INPUT |
| | XINT | X INTERRUPT |
| | XMW | X MEMORY WRITE ENABLE |
| | XO | X´ TAL OSCILLATOR OUTPUT |
| | XRE | X READ ENABLE |
| | XSRMCE | X SRAM CHIP ENABLE |
| | XSRMOE | X SRAM OUTPUT ENABLE |
| | XSRMWE | X SRAM WRITE ENABLE |
| | XVCS | X V-DEC CHIPSELECT |
| | XVDS | X V-DEC CONTROL BUS STROBE |
| | XVSYNCO | X VERTICAL SYNC OUTPUT |

TOP PREVIOUS NEXT

# 17 Block Diagram

TOP PREVIOUS NEXT

17.1 Power Supply Block Diagram

17.2 Analog Video Block Diagram

17.3 Analog Audio Block Diagram

17.4 Analog Timer Block Diagram

17.5 Digital Block Diagram (Video Section)

17.6 Digital Block Diagram (Audio Section)

17.7 Digital Block IC Pin Terminal Chart

TOP PREVIOUS NEXT

# 17.1 Power Supply Block Diagram







# 17.2 Analog Video Block Diagram





# 17.3 Analog Audio Block Diagram





# 17.4 Analog Timer Block Diagram





# 17.5 Digital Block Diagram (Video Section)





# 17.6 Digital Block Diagram (Audio Section)





# 17.7 Digital Block IC Pin Terminal Chart









# 18 Schematic Diagram

TOP PREVIOUS NEXT

18.1 Interconnection Schematic Diagram

18.2 Main Power Schematic Diagram

18.3 Sub Power Section (Main P.C.B. (1 / 5)) Schematic Diagram (P)

18.4 Main Net Section (Main P.C.B. (2 / 5)) Schematic Diagram (M)

18.5 Video I / O Section (Main P.C.B. (3 / 5)) Schematic Diagram (V)

18.6 Audio Main Section (Main P.C.B. (4 / 5)) Schematic Diagram (A)

18.7 Timer Section (Main P.C.B. (5 / 5)) Schematic Diagram (T)

18.8 Glue Net Section (Digital P.C.B. (1 / 6)) Schematic Diagram (GN)

18.9 AV Encoder Section (Digital P.C.B. (2 / 6)) Schematic Diagram (EN)

18.10 Real Time Stream Control (RTSC) Section (Digital P.C.B. (3 / 6)) Schematic Diagram (TR)

18.11 AV Decoder / Main CPU Section (Digital P.C.B. (4 / 6)) Schematic Diagram (MC)

18.12 Audio I / O Section (Digital P.C.B. (5 / 6)) Schematic Diagram (AI)

18.13 DV1394 & DV Jack Section (Digital P.C.B. (6 / 6)) Schematic Diagram (DV)

18.14 SD & PC Card Schematic Diagram

18.15 IR Schematic Diagram

18.16 Front (R) Schematic Diagram

TOP PREVIOUS NEXT

# 18.1 Interconnection Schematic Diagram







# 18.2 Main Power Schematic Diagram





# 18.3 Sub Power Section (Main P.C.B. (1/5)) Schematic Diagram (P)





# 18.4 Main Net Section (Main P.C.B. (2/5)) Schematic Diagram (M)





# 18.5 Video I/O Section (Main P.C.B. (3/5)) Schematic Diagram (V)







# 18.6 Audio Main Section (Main P.C.B. (4/5)) Schematic Diagram (A)





# 18.7 Timer Section (Main P.C.B. (5/5)) Schematic Diagram (T)







# 18.8 Glue Net Section (Digital P.C.B. (1/6)) Schematic Diagram (GN)







# 18.9 AV Encoder Section (Digital P.C.B. (2/6)) Schematic Diagram (EN)









# 18.10 Real Time Stream Control (RTSC) Section (Digital P.C.B. (3/6)) Schematic Diagram (TR)







# 18.11 AV Decoder/Main CPU Section (Digital P.C.B. (4/6)) Schematic Diagram (MC)







# 18.12 Audio I/O Section (Digital P.C.B. (5/6)) Schematic Diagram (AI)





# 18.13 DV1394& DV Jack Section (Digital P.C.B. (6/6)) Schematic Diagram (DV)





# 18.14 SD& PC Card Schematic Diagram







# 18.15 IR Schematic Diagram





# 18.16 Front (R) Schematic Diagram





# 19 Print Circuit Board

TOP PREVIOUS NEXT

19.1 Power P.C.B.

19.2 Main P.C.B.

19.2.1 Main P.C.B. (1 / 4 Section)

19.2.2 Main P.C.B. (2 / 4 Section)

19.2.3 Main P.C.B. (3 / 4 Section)

19.2.4 Main P.C.B. (4 / 4 Section)

19.2.5 Main P.C.B. Address Information

19.3 Digital P.C.B.

19.3.1 Digital P.C.B. (Component Side)

19.3.2 Digital P.C.B. (Foil Side)

19.3.3 Digital P.C.B. Address Information

19.3.4 SD & PC Card P.C.B. (Component Side)

19.3.5 SD & PC Card P.C.B. (Foil Side)

19.4 IR P.C.B.

19.5 Front (R) P.C.B.

TOP PREVIOUS NEXT

# 19.1 Power P.C.B.





# 19.2 Main P.C.B.

TOP PREVIOUS NEXT

19.2.1 Main P.C.B. (1 / 4 Section)

19.2.2 Main P.C.B. (2 / 4 Section)

19.2.3 Main P.C.B. (3 / 4 Section)

19.2.4 Main P.C.B. (4 / 4 Section)

19.2.5 Main P.C.B. Address Information

TOP PREVIOUS NEXT

# 19.2.1 Main P.C.B. (1/4 Section)





# 19.2.2 Main P.C.B. (2/4 Section)





# 19.2.3 Main P.C.B. (3/4 Section)





# 19.2.4 Main P.C.B. (4/4 Section)





# 19.2.5 Main P.C.B. Address Information





# 19.3 Digital P.C.B.

TOP PREVIOUS NEXT

19.3.1 Digital P.C.B. (Component Side)

19.3.2 Digital P.C.B. (Foil Side)

19.3.3 Digital P.C.B. Address Information

19.3.4 SD & PC Card P.C.B. (Component Side)

19.3.5 SD & PC Card P.C.B. (Foil Side)

TOP PREVIOUS NEXT

# 19.3.1 Digital P.C.B. (Component Side)





# 19.3.2 Digital P.C.B. (Foil Side)





# 19.3.3 Digital P.C.B. Address Information





# 19.3.4 SD& PC Card P.C.B. (Component Side)





# 19.3.5 SD& PC Card P.C.B. (Foil Side)





# 19.4 IR P.C.B.







# 19.5 Front (R) P.C.B.





# 20 Exploded Views

TOP PREVIOUS NEXT

20.1 Casing Parts & Mechanism Section 1

20.2 Casing Parts & Mechanism Section 2

20.3 Packing & Accessories Section

TOP PREVIOUS NEXT

# 20.1 Casing Parts& Mechanism Section 1





# 20.2 Casing Parts& Mechanism Section 2





# 20.3 Packing& Accessories Section





# 21 Replacement Parts List

TOP PREVIOUS NEXT

Notes:

*Important safety notice:

Components identified by ⚠ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufactures specified parts shown in the parts list.

*Warning: This product uses a laser diode. Refer to caution statements.

*Capacity values are in microfarads (μF) unless specified otherwise, P=Pico-farads (pF), F=Farads (F).

*Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000k (OHM).

*The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

* <IA> , mark in Remarks indicate languages of instruction manuals. [<IA>: English] All parts are supplied by S.P.C..

| Ref. No. | Part No. | Part Name & Description | Pcs | Remarks |
|---|---|---|---|---|
| | | | | |
| • | 01 | CASING/ACCESSORY/PACKING | | |
| | | | | |
| 1 | ETXMM508A4F | POWER SUPPLY P.C.B. | 1 | (RTL) ⚠ |
| 2 | REP3662G | MAIN P.C.B. | 1 | (RTL) |
| 3 | RFKBE95HP | DIGITAL P.C.B. | 1 | |
| 4 | L6FALCBE0002 | FAN MOTOR | 1 | |
| 5 | RGR0350J-A2 | REAR PANEL | 1 | ⚠ |
| 6 | RKA0144-K | FOOT RUBBER | 4 | |
| 7 | VHD0690 | SCREW | 5 | |

| | | | | |
|---|---|---|---|---|
| 8 | XSN3+4FZ | SCREW | 1 | |
| 9 | RHD30111 | SCREW | 20 | |
| 10 | RHD30115 | SCREW | 5 | |
| 11 | RMX0298 | PCB SPACER | 1 | |
| 12 | RYP1254A-S | FRONT PANEL ASS Y1 | 1 | |
| 12-1 | RKF0700-S | TRAY DOOR | 1 | |
| 12-2 | RGK1810-S | TRAY ORNAMENT | 1 | |
| 12-3 | VMB3410 | TRAY SPRING | 1 | |
| 12-4 | RGU2320-S | OPEN-PLAY BUTTON | 1 | |
| 12-5 | RGU2289-S | POWER BUTTON | 1 | |
| 12-6 | RGU2291A-Q | REC BUTTON | 1 | |
| 12-9 | RGK1773-S | REC BUTTON RING | 1 | |
| 12-10 | RGL0663B-Q | PANEL LIGHT | 1 | |
| 12-11 | RKF0701F-H | PANEL DOOR | 1 | |
| 12-13 | VGB0560 | PANASONIC BADGE | 1 | |
| 12-14 | RHD26016 | SCREW | 1 | |
| 12-15 | RMX0299 | DAMPER SHEET | 1 | |
| 12-16 | RMR1637-W | REFLECTOR DVD | 1 | |
| 12-17 | RMR1638-W | REFLECTOR HDD | 1 | |
| 12-18 | XTN2+6G | SCREW | 2 | |
| 12-19 | RMR1655-W | REFLECTOR COVER | 1 | |
| 12-20 | RGU2321-H | OPERATION BUTTON | 1 | |
| 13 | REP3713D | FRONT(R) P.C.B. | 1 | (RTL) |
| 14 | RMC0595 | EARTH PLATE | 1 | |
| 15 | RMA1778 | FRONT ANGLE | 1 | |
| 16 | XTBS26+10J | SCREW | 6 | |
| 17 | RHD30113 | SCREW | 2 | |
| 18 | RKM0508B-S | TOP COVER | 1 | ⚠ |
| 19 | VHD0690 | SCREW | 3 | |
| 20 | RMR1656-W1 | LED HOLDER | 1 | |
| 21 | RFKV0032HDK | HDD 160GB | 1 | |
| 22 | VEK0G75 | FFC(42P) | 1 | |
| 23 | VEE0Z41 | WIRE WITH CONNECTOR | 1 | |
| 24 | RMA1835 | HDD HOLDER | 1 | |
| 25 | RMZ0747 | INSULATED SHEET | 1 | |
| 26 | RMA1834 | HDD BRACKET | 1 | |

| | | | | |
|---|---|---|---|---|
| 27 | RXQ1208 | SUPER SHEET ASS Y | 1 | |
| 28 | K1MZ40Z00002 | HDD CONNECTOR | 1 | |
| 29 | RMC0607 | PC EARTH | 1 | |
| 30 | RMC0606 | PC ANGLE EARTH | 1 | |
| 31 | VWJ1731 | FFC(42P) | 1 | |
| 33 | RMV0282-2 | BARRIER | 1 | |
| 34 | RMA1843 | CARD ANGLE | 1 | |
| 35 | RMN0751 | FAN COVER | 1 | |
| 36 | VEP73115A | SD CARD P.C.B. | 1 | (RTL) |
| 36-1 | RYQ0520-K | CARD HOLDER ASS Y | 1 | |
| 36-2 | VXA7883 | PC CARD EJECTOR | 1 | |
| 36-3 | XYN2+F6 | SCREW | 2 | |
| 37 | VEP73116A | DV JACK P.C.B. | 1 | (RTL) |
| 38 | XTN3+23JFZ | SCREW | 2 | |
| 39 | REP3763A | IR P.C.B. | 1 | (RTL) |
| 40 | VXY1814 | RAM DRIVE UNIT | 1 | (RTL) |
| 41 | RGQ0324-K | SHEET | 1 | |
| | | | | |
| A1 | EUR7721KL0 | REMOTE CONTROL ASS Y | 1 | |
| A1-1 | UR77EC2003A | BATTERY COVER | 1 | |
| A2 | K2KA6CA00001 | AV CORD | 1 | |
| A3 | K2CB2CB00006 | AC CORD | 1 | ⚠ |
| A4 | K2KZ2BA00001 | RF COAXIAL CABLE | 1 | |
| A5 | RPQF0254 | ACCESSORY CASE | 1 | |
| A6 | RPF0378 | POLYETHYLENE BAG(F.B.) | 1 | |
| A7 | RPQ1594 | PAD | 1 | |
| A9 | RQCA1004 | DISC CAUTION SHEET | 1 | |
| A10 | RQCA1119-1 | HDD CAUTION SHEET | 1 | |
| A11 | RQCA1244 | DVD-R REC SHEET | 1 | |
| A12 | RQCA1263 | PC CARD CAUTION SHEET | 1 | |
| A13 | RQCB0833 | CCP SHEET | 1 | |
| A14 | RQCC2431 | DVD MEDIA SHEET | 1 | |
| A15 | RQT7392-P | OPERATING INSTRUCTIONS | 1 | <IA> ⚠ |
| A16 | RQCA1253 | EPG SET-UP GUIDE | 1 | |
| A17 | K2ZZ04C00002 | IR BLUSTER | 1 | |

| | | | | |
|---|---|---|---|---|
| PC1 | RPG7251 | PACKING CASE | 1 | |
| PC2 | RPN1727A | CUSHION A | 1 | |
| PC3 | RPN1727B | CUSHION B | 1 | |
| PC4 | VPF0505 | POLYETHYLENE BAG(UNIT) | 1 | |
| | | | | |
| • | 02 | REP3662G | | (MAIN P.C.B.) |
| | | | | |
| B7501 | CR2354-1GUF | LITHIUM BATTERY | 1 | |
| | | | | |
| C1503 | ECJ1VB1A105K | 10V 1U | 1 | |
| C1505 | F2A1A470A388 | 10V 47U | 1 | |
| C1512 | ECJ1VB0J105K | 6.3V 1U | 1 | |
| C1513 | ECJ1VB1A105K | 10V 1U | 1 | |
| C1514 | ECJ1VB0J105K | 6.3V 1U | 1 | |
| C1515 | ECJ1XB1C104K | 16V 0.1U | 1 | |
| C1516 | ECJ1VB1A105K | 10V 1U | 1 | |
| C1518 | F2A1A470A388 | 10V 47U | 1 | |
| C1519 | ECJ1XB1C104K | 16V 0.1U | 1 | |
| C1520 | ECJ1VB1A105K | 10V 1U | 1 | |
| C1521 | ECJ1VB0J105K | 6.3V 1U | 1 | |
| C1522 | ECJ1VC1H331J | 50V 330P | 1 | |
| C1523 | ECJ1VB1A105K | 10V 1U | 1 | |
| C1524 | F2A1A470A388 | 10V 47U | 1 | |
| C1527,28 | ECJ1VB0J105K | 6.3V 1U | 2 | |
| C1531 | F2A1A470A388 | 10V 47U | 1 | |
| C1533,34 | ECJ1VB0J105K | 6.3V 1U | 2 | |
| C1537 | EEUFC1E101S | 25V 100U | 1 | |
| C1539 | F2A0J102A256 | 6.3V 1000U | 1 | |
| C1540 | F2A1E4700048 | 25V 47U | 1 | |
| C1541 | F2A1A471A211 | 10V 470U | 1 | |
| C1543 | F2A1E221A210 | 25V 220U | 1 | |
| C1545 | ECJ2VB1E104K | 25V 0.1U | 1 | |
| C3001 | ECJ1VC1H561J | 50V 560P | 1 | |
| C3005 | ECJ1VB1C333K | 16V 0.033U | 1 | |
| C3006-08 | ECJ1XB1C104K | 16V 0.1U | 3 | |
| C3010-17 | ECJ1VB1H103K | 50V 0.01U | 8 | |
| C3018 | F2A1E4700048 | 25V 47U | 1 | |
| C3019-21 | ECJ1VB1H103K | 50V 0.01U | 3 | |

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|---|---|---|---|---|
| C3022 | F2A0J1020045 | 6.3V 1000U | 1 | |
| C3023 | F2A1A1010072 | 10V 100U | 1 | |
| C3024 | F2A0J1020045 | 6.3V 1000U | 1 | |
| C3025 | F2A1A1010072 | 10V 100U | 1 | |
| C3026 | F2A0J1020045 | 6.3V 1000U | 1 | |
| C3027,28 | F2A1A1010072 | 10V 100U | 2 | |
| C3029 | F2A0J1020045 | 6.3V 1000U | 1 | |
| C3030 | F2A1A1010072 | 10V 100U | 1 | |
| C3031 | F2A0J1020045 | 6.3V 1000U | 1 | |
| C3032,33 | ECJ1VB0J105K | 6.3V 1U | 2 | |
| C3034 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C3035,36 | F2A1H2200032 | 50V 22U | 2 | |
| C3037 | ECJ1XB1C104K | 16V 0.1U | 1 | |
| C3038 | F2J1C4700005 | 16V 47U | 1 | |
| C3039 | ECJ1XB1C104K | 16V 0.1U | 1 | |
| C3040 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C3041 | ECJ1XB1C104K | 16V 0.1U | 1 | |
| C3042 | F2J1C4700005 | 16V 47U | 1 | |
| C3043 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C3044 | F2A1E4700048 | 25V 47U | 1 | |
| C3046,47 | ECJ1VB1H103K | 50V 0.01U | 2 | |
| C3901 | ECJ1XB1C104K | 16V 0.1U | 1 | |
| C3902 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C3909 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C3910,11 | ECJ1XB1C104K | 16V 0.1U | 2 | |
| C3912 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C3917,18 | ECJ1VB1H103K | 50V 0.01U | 2 | |
| C4003-06 | F2A1H1R0A494 | 50V 1U | 4 | |
| C4009,10 | ECJ1VF1C104Z | 16V 0.1U | 2 | |
| C4011 | ECJ2VB1E104K | 25V 0.1U | 1 | |
| C4013,14 | F2A1H1R0A494 | 50V 1U | 2 | |
| C4016 | F2A1C221A497 | 16V 220U | 1 | |
| C4017 | ECJ1XC1H820J | 50V 82P | 1 | ECJ1VC1H820J |
| C4019 | ECJ1XC1H820J | 50V 82P | 1 | ECJ1VC1H820J |
| C4022 | ECJ1XB1C104K | 16V 0.1U | 1 | |
| C4023 | F2A1C471A498 | 16V 470U | 1 | |
| C4024,25 | F2A1C470A494 | 16V 47U | 2 | |
| C4026,27 | F2A1H1R0A494 | 50V 1U | 2 | |
| C4028,29 | F2A1C100A494 | 16V 10U | 2 | |

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|---|---|---|---|---|
| C4036 | F2A1C470A494 | 16V 47U | 1 | |
| C4037 | F2A1C221A497 | 16V 220U | 1 | |
| C4038 | F2A1C470A494 | 16V 47U | 1 | |
| C4039-42 | ECJ2VC1H102J | 50V 1000P | 4 | |
| C4045,46 | ECJ1VF1C104Z | 16V 0.1U | 2 | |
| C4047 | ECQV1H104JL | 50V 0.1U | 1 | |
| C4049 | F2A0J471A497 | 6.3V 470U | 1 | |
| C4050 | ECQV1H104JL | 50V 0.1U | 1 | |
| C4052 | F2A1C471A498 | 16V 470U | 1 | |
| C4901 | F2A0J470A179 | 6.3V 47U | 1 | |
| C4902 | ECJ1VF1C104Z | 16V 0.1U | 1 | |
| C4903 | F2A0J470A179 | 6.3V 47U | 1 | |
| C4904,05 | ECJ1VF1C104Z | 16V 0.1U | 2 | |
| C4906 | ECJ1VC1H220J | 50V 22P | 1 | |
| C7401 | ECJ1VC1H030C | 50V 3P | 1 | |
| C7404 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C7405 | F2A0J470A012 | 6.3V 47U | 1 | |
| C7406,07 | ECJ1XB1C104K | 16V 0.1U | 2 | |
| C7416 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C7417 | F2A1H1R00071 | 50V 1U | 1 | |
| C7432,33 | F2A1C100A494 | 16V 10U | 2 | |
| C7436 | ECJ1XB1C104K | 16V 0.1U | 1 | |
| C7437 | F2A0J470A012 | 6.3V 47U | 1 | |
| C7525 | ECJ1VC1H101J | 50V 100P | 1 | |
| C7526 | ECJ1VF1C104Z | 16V 0.1U | 1 | |
| C7528 | ECJ1VF1C104Z | 16V 0.1U | 1 | |
| C7550 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C7551 | F2A1H2200032 | 50V 22U | 1 | |
| C7552 | ECJ1VF1H104Z | 50V 0.1U | 1 | |
| C7555 | F2A1E2210050 | 25V 220U | 1 | |
| C7556 | ECA1AHG221 | 10V 220U | 1 | |
| C7557 | ECQB1H473KF | 50V 0.047U | 1 | |
| C7558 | F2A1H5600009 | 50V 56U | 1 | |
| C7559 | ECQB1H223KF3 | 50V 0.022U | 1 | |
| C7560 | F2A1H2200032 | 50V 22U | 1 | |
| C7565 | ECJ2YB0J475K | 6.3V 4.7U | 1 | |
| C7566,67 | ECJ1XB1C104K | 16V 0.1U | 2 | |
| C7569 | ECJ1VF1C104Z | 16V 0.1U | 1 | |
| C7580-83 | ECJ1VC1H101J | 50V 100P | 4 | |

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|---|---|---|---|---|
| C7584,85 | ECJ1VC1H180J | 50V 18P | 2 | |
| C7586 | ECJ1VC1H220J | 50V 22P | 1 | |
| C7587 | ECJ1VC1H150J | 50V 15P | 1 | |
| C7588 | ECJ2YB0J475K | 6.3V 4.7U | 1 | |
| C7589 | ECJ1VF1C104Z | 16V 0.1U | 1 | |
| C7595 | ECJ1VF1C104Z | 16V 0.1U | 1 | |
| C7596 | ECJ1VC1H470J | 50V 47P | 1 | |
| C7597 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C7598 | ECJ1VC1H470J | 50V 47P | 1 | |
| C7599 | ECJ1XB1C104K | 16V 0.1U | 1 | |
| C7600 | ECJ1VC1H470J | 50V 47P | 1 | |
| C7601 | ECJ1XB1C104K | 16V 0.1U | 1 | |
| C7602 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C7604 | ECJ1VF1C104Z | 16V 0.1U | 1 | |
| C7607 | ECJ1VF1C104Z | 16V 0.1U | 1 | |
| C7609,10 | ECJ1VC1H100C | 50V 10P | 2 | |
| C7611-13 | ECJ1VB1H103K | 50V 0.01U | 3 | |
| C7618 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C7620 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C7626 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C7633 | F2A0J471A280 | 6.3V 470U | 1 | |
| C7636 | ECJ1VF1A105Z | 10V 1U | 1 | |
| C7637 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C7639 | ECJ1VF1C104Z | 16V 0.1U | 1 | |
| C7650 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C7652 | ECJ1VF1A105Z | 10V 1U | 1 | |
| C7653 | ECJ1XB1C104K | 16V 0.1U | 1 | |
| C7654 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| C7657 | ECJ1VF1H104Z | 50V 0.1U | 1 | |
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| D1501 | MA165TA5 | DIODE | 1 | MA2C16500E |
| D4001,02 | MA3Z142D0RG | DIODE | 2 | |
| D7401 | MA4300N-M | DIODE | 1 | MAZ4300NM |
| D7501 | MAZ4240NMF | DIODE | 1 | |
| D7502 | B0AAGM000003 | DIODE | 1 | B0AAGM000007 |
| D7503 | VSD0002 | DIODE | 1 | B0HAGR000005 |
| D7504,05 | MA2C18500E | DIODE | 2 | |
| D7506 | MAZ4300NLF | DIODE | 1 | |
| D7507 | B0JDCE000002 | DIODE | 1 | |

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|---|---|---|---|---|
| D7511 | B0JACE000001 | DIODE | 1 | |
| D7512 | B3AEA0000049 | DIODE | 1 | |
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| DP7501 | A2BD00000074 | FL DISPLAY TUBE | 1 | |
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| IC1502 | C0DBAHG00013 | IC | 1 | |
| IC1505 | C0CBCDD00008 | IC | 1 | |
| IC1506 | C0CBCDD00002 | IC | 1 | |
| IC1507 | C0CBCDD00006 | IC | 1 | |
| IC1508 | C0DBEGD00002 | IC | 1 | |
| IC1509 | C0DBEFG00003 | IC | 1 | |
| IC1510 | C0DBEGG00003 | IC | 1 | |
| IC3001 | C1AB00001979 | IC | 1 | |
| IC4001 | C1AB00001920 | IC | 1 | |
| IC4004 | C0CBCDC00026 | IC | 1 | |
| IC4005 | C0CBCDC00027 | IC | 1 | |
| IC4901 | C0JBAB000173 | IC | 1 | |
| IC7404 | C0BBBB000006 | IC | 1 | |
| IC7501 | C2CBJG000446 | IC | 1 | |
| IC7502 | C0HBB0000033 | IC | 1 | |
| IC7503 | C0EBJ0000110 | IC | 1 | |
| IC7505 | C0EBE0000194 | IC | 1 | |
| IC7506 | C0ABBA000146 | IC | 1 | |
| | | | | |
| IP7501 | ICP-N10T104 | IC PROTECTOR | 1 | B1ZAZ0000035 ⚠ |
| | | | | |
| JK3901 | K1U822B00003 | JACK,L1,L3 | 1 | |
| JK3902 | K1U820B00003 | JACK,OUT1, OUT2 | 1 | |
| JK3903 | K1U407B00004 | JACK,A/V OUT,OPTICAL OUT | 1 | |
| JK3904 | K1U415B00001 | JACK,L2 | 1 | |
| | | | | |
| K3001 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| K7401 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| K7403,04 | ERJ3GEY0R00V | 1/10W 0 | 2 | |
| K7502 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| K7506-10 | ERJ3GEY0R00V | 1/10W 0 | 5 | |
| K7512 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
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| L1501 | G0A220G00018 | COIL 22UH | 1 | |

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|---|---|---|---|---|
| L3001,02 | ELEXH220JBV | COIL 22UH | 2 | |
| L4901 | ELESE220KA | COIL 22UH | 1 | |
| L7401 | G0A220G00018 | COIL 22UH | 1 | |
| L7502 | ELESE101K | COIL 100UH | 1 | |
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| LB1501 | J0JHC0000032 | COIL | 1 | |
| LB1503 | J0JHC0000032 | COIL | 1 | |
| LB1504,05 | J0JKB0000003 | COIL | 2 | |
| LB3905-10 | J0JCC0000103 | COIL | 6 | |
| LB3915-20 | J0JCC0000103 | COIL | 6 | |
| LB3924-29 | J0JCC0000103 | COIL | 6 | |
| LB4901 | ERJ3GEYJ331V | 1/10W 330U | 1 | |
| LB4902 | J0JGC0000020 | COIL | 1 | |
| LB4903-12 | J0JCC0000103 | COIL | 10 | |
| LB7402 | J0JHC0000032 | COIL | 1 | |
| LB7409,10 | J0JHC0000032 | COIL | 2 | |
| LB7411,12 | ERJ3GEY0R00V | 1/10W 0 | 2 | |
| LB7413 | J0JHC0000032 | COIL | 1 | |
| LB7501 | VLP0175 | COIL | 1 | J0JCC0000060 |
| LB7502 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| LB7503 | J0JKB0000037 | COIL | 1 | |
| LB7504 | J0JGC0000020 | COIL | 1 | |
| LB7505,06 | J0JCC0000103 | COIL | 2 | |
| LB7507,08 | ERJ3GEY0R00V | 1/10W 0 | 2 | |
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| P1501 | K1KA08A00427 | CONNECTOR(8P) | 1 | |
| P1502 | K1KA23A00004 | CONNECTOR(23P) | 1 | |
| P7402 | K1KA88A00002 | CONNECTOR(88P) | 1 | |
| P7503 | K1KA03A00173 | CONNECTOR(3P) | 1 | |
| P7504 | K1KB12B00049 | CONNECTOR(12P) | 1 | |
| | | | | |
| PP7401 | VJP3042G008W | CONNECTOR(8P) | 1 | K1KA08A00163 |
| | | | | |
| Q4001 | 2SB1218A | TRANSISTOR | 1 | |
| Q4002-05 | 2SD132800L | TRANSISTOR | 4 | |
| Q7401 | 2SB1218A | TRANSISTOR | 1 | |
| Q7503 | 2SD1994B | TRANSISTOR | 1 | |
| Q7504 | 2SD0601A | TRANSISTOR | 1 | |
| Q7507 | 2SB0709ARL | TRANSISTOR | 1 | |

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|---|---|---|---|---|
| Q7508 | 2SD1819AWL | TRANSISTOR | 1 | |
| Q7512 | 2SD0874A0L | TRANSISTOR | 1 | |
| Q7517 | 2SD132800L | TRANSISTOR | 1 | |
| Q7520 | 2SD0601A | TRANSISTOR | 1 | |
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| QR4001-04 | UN5211 | TRANSISTOR | 4 | UNR5211 |
| QR7502 | UN5212TX | TRANSISTOR | 1 | UNR521200L |
| QR7507 | UN5113TW | TRANSISTOR | 1 | |
| | | | | |
| R1501 | ERJ3GEYJ822V | 1/10W 8.2K | 1 | D0GB822JA002 |
| R1502 | ERJ3GEYJ332V | 1/10W 3.3K | 1 | D0GB332JA002 |
| R1503 | ERJ3GEYJ101 | 1/10W 100 | 1 | D0GB101JA002 |
| R1504 | ERDS2FJ271 | 1/4W 270 | 1 | |
| R1506 | ERDS2FJ271 | 1/4W 270 | 1 | |
| R1507 | ERJ3RED330 | 1/16W 33 | 1 | |
| R1508 | ERJ3RBD201 | 1/16W 200 | 1 | |
| R1509 | ERJ3RBD102V | 1/16W 1K | 1 | |
| R1510 | ERJ3RED220 | 1/16W 22 | 1 | |
| R1511 | ERJ3RBD182V | 1/16W 1.8K | 1 | |
| R1512 | ERJ3RBD202 | 1/16W 2K | 1 | |
| R1515,16 | ERDS2FJ271 | 1/4W 270 | 2 | |
| R3025 | ERJ3RBD153 | 1/16W 15K | 1 | |
| R3026 | ERJ3GEYJ105V | 1/10W 1M | 1 | |
| R3027 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| R3028 | ERJ3GEYJ471V | 1/10W 470 | 1 | |
| R3029 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| R3030 | ERJ3EKF75R0 | 1/10W 75 | 1 | |
| R3031 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| R3032,33 | ERJ3GEYJ103V | 1/10W 10K | 2 | D0GB103JA002 |
| R3036 | ERJ3GEYJ103V | 1/10W 10K | 1 | D0GB103JA002 |
| R3038 | ERJ3GEYJ330V | 1/10W 33 | 1 | D0GB330JA002 |
| R3039,40 | ERJ3GEYJ221V | 1/10W 220 | 2 | |
| R3041 | ERJ3RBD104 | 1/16W 100K | 1 | |
| R3901,02 | ERJ3EKF75R0 | 1/10W 75 | 2 | |
| R3903 | ERJ3GEYJ102V | 1/10W 1K | 1 | |
| R3904,05 | ERJ3EKF75R0 | 1/10W 75 | 2 | |
| R3906 | ERJ3GEYJ102V | 1/10W 1K | 1 | |
| R3907-14 | ERJ3EKF75R0 | 1/10W 75 | 8 | |
| R3915,16 | ERJ3GEYJ912V | 1/10W 9.1K | 2 | |

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|---|---|---|---|---|
| R3923-25 | ERJ3EKF75R0 | 1/10W 75 | 3 | |
| R3926 | ERJ3GEYJ102V | 1/10W 1K | 1 | |
| R3927-29 | ERJ3EKF75R0 | 1/10W 75 | 3 | |
| R4001-04 | ERJ3GEYJ104 | 1/10W 100K | 4 | |
| R4008 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| R4011-14 | ERJ6GEYJ102V | 1/8W 1K | 4 | |
| R4015,16 | ERJ3GEYJ104 | 1/10W 100K | 2 | |
| R4017-20 | ERJ3GEY0R00V | 1/10W 0 | 4 | |
| R4024,25 | ERJ3GEYJ101 | 1/10W 100 | 2 | D0GB101JA002 |
| R4026 | JAR0816P123D | 1/16W 12K | 1 | D0HB123ZA002 |
| R4027 | D0HB622ZA002 | 1/16W 6.2K | 1 | |
| R4028 | JAR0816P123D | 1/16W 12K | 1 | D0HB123ZA002 |
| R4029 | D0HB622ZA002 | 1/16W 6.2K | 1 | |
| R4031,32 | ERJ6GEYJ102V | 1/8W 1K | 2 | |
| R4037,38 | ERJ3GEYJ104 | 1/10W 100K | 2 | |
| R4039 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| R4042 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| R4043,44 | JAR0816P392D | 1/16W 3900 | 2 | D0HB392ZA002 |
| R4045,46 | D0HB622ZA002 | 1/16W 6.2K | 2 | |
| R4049-52 | ERJ3GEYJ103V | 1/10W 10K | 4 | D0GB103JA002 |
| R4059,60 | ERJ3GEYJ473V | 1/10W 47K | 2 | D0GB473JA002 |
| R4061,62 | ERJ3GEYJ681V | 1/10W 680 | 2 | D0GB681JA002 |
| R4063,64 | ERJ3GEYJ272V | 1/10W 2.7K | 2 | |
| R4065,66 | ERJ3GEYJ681V | 1/10W 680 | 2 | D0GB681JA002 |
| R4067,68 | ERJ3GEYJ272V | 1/10W 2.7K | 2 | |
| R4069-72 | ERJ3GEYJ221V | 1/10W 220 | 4 | |
| R4074,75 | ERJ3GEY0R00V | 1/10W 0 | 2 | |
| R4077,78 | ERJ3GEY0R00V | 1/10W 0 | 2 | |
| R4082 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| R4903 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| R7403,04 | ERJ3GEYJ101 | 1/10W 100 | 2 | D0GB101JA002 |
| R7406,07 | ERJ3GEYJ101 | 1/10W 100 | 2 | D0GB101JA002 |
| R7418,19 | ERG2SJ471E | 2W 470 | 2 | |
| R7442 | ERJ3RBD222V | 1/16W 2.2K | 1 | |
| R7443 | ERJ3RBD102V | 1/16W 1K | 1 | |
| R7444 | ERJ3RBD153 | 1/16W 15K | 1 | |
| R7445 | ERJ3RBD222V | 1/16W 2.2K | 1 | |
| R7446 | ERJ3RBD133V | 1/16W 13K | 1 | |
| R7452 | ERJ3GEYJ681V | 1/10W 680 | 1 | D0GB681JA002 |

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|---|---|---|---|---|
| R7454 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| R7505 | ERJ3RBD273V | 1/16W 27K | 1 | |
| R7507 | ERDS2FJ331 | 1/4W 330 | 1 | |
| R7508 | ERDS2FJ5R6 | 1/4W 5.6 | 1 | |
| R7509 | ERJ3GEYJ333V | 1/10W 33K | 1 | D0GB333JA002 |
| R7510 | ERJ3GEYJ332V | 1/10W 3.3K | 1 | D0GB332JA002 |
| R7511 | ERJ3GEYJ103V | 1/10W 10K | 1 | D0GB103JA002 |
| R7512,13 | ERJ3GEYJ473V | 1/10W 47K | 2 | D0GB473JA002 |
| R7514 | ERJ3GEYJ101 | 1/10W 100 | 1 | D0GB101JA002 |
| R7516 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| R7519 | ERJ3GEYJ102V | 1/10W 1K | 1 | |
| R7520 | ERJ3GEYJ103V | 1/10W 10K | 1 | D0GB103JA002 |
| R7521 | ERJ3GEYG152 | 1/10W 1.5K | 1 | |
| R7522 | ERJ3GEYG562V | 1/10W 5.6K | 1 | |
| R7523 | ERJ3GEYD153V | 1/10W 15K | 1 | D0HB153ZA002 |
| R7530-33 | ERJ3GEYJ473V | 1/10W 47K | 4 | D0GB473JA002 |
| R7534-37 | ERJ3GEYJ101 | 1/10W 100 | 4 | D0GB101JA002 |
| R7538 | ERJ3GEYJ472V | 1/10W 4.7K | 1 | |
| R7539 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| R7540 | ERJ3GEYD274V | 1/10W 270K | 1 | ERA3YKD274V |
| R7541 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| R7542 | ERJ3GEYJ103V | 1/10W 10K | 1 | D0GB103JA002 |
| R7548 | ERJ3GEYJ103V | 1/10W 10K | 1 | D0GB103JA002 |
| R7549 | ERJ3GEYJ511 | 1/10W 510 | 1 | |
| R7550,51 | ERJ3GEYJ202V | 1/10W 2K | 2 | |
| R7556,57 | ERJ3GEYJ101 | 1/10W 100 | 2 | D0GB101JA002 |
| R7561 | ERDS2TJ392 | 1/4W 3.9K | 1 | |
| R7562-64 | ERJ3GEYJ101 | 1/10W 100 | 3 | D0GB101JA002 |
| R7569 | ERJ3GEYJ101 | 1/10W 100 | 1 | D0GB101JA002 |
| R7570 | ERJ3GEYJ104 | 1/10W 100K | 1 | |
| R7583,84 | ERJ3GEYJ473V | 1/10W 47K | 2 | D0GB473JA002 |
| R7585 | ERJ3GEYJ223V | 1/10W 22K | 1 | D0GB223JA002 |
| R7588 | ERJ3GEYJ472V | 1/10W 4.7K | 1 | |
| R7589-91 | ERJ3RBD822 | 1/10W 8.2K | 3 | |
| R7595,96 | ERJ3GEYJ473V | 1/10W 47K | 2 | D0GB473JA002 |
| R7597 | ERJ3GEYD153V | 1/10W 15K | 1 | D0HB153ZA002 |
| R7598 | ERJ3GEYJ102V | 1/10W 1K | 1 | |
| R7599 | ERJ3GEYJ473V | 1/10W 47K | 1 | D0GB473JA002 |
| R7600,01 | ERJ3GEYJ103V | 1/10W 10K | 2 | D0GB103JA002 |

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|---|---|---|---|---|
| R7602 | ERJ3GEYJ821V | 1/10W 820 | 1 | |
| R7603 | ERJ3GEYJ183V | 1/10W 18K | 1 | D0GB183JA002 |
| R7604 | ERJ3GEYJ473V | 1/10W 47K | 1 | D0GB473JA002 |
| R7611 | ERJ3GEYJ101 | 1/10W 100 | 1 | D0GB101JA002 |
| R7613 | ERJ3GEYJ101 | 1/10W 100 | 1 | D0GB101JA002 |
| R7617 | ERDS2FJ750 | 1/4W 75 | 1 | |
| R7626-29 | ERJ3GEYJ101 | 1/10W 100 | 4 | D0GB101JA002 |
| R7630 | ERJ3GEYJ273V | 1/10W 27K | 1 | D0GB273JA002 |
| R7633 | ERJ3GEYJ223V | 1/10W 22K | 1 | D0GB223JA002 |
| R7636-38 | ERJ3GEYJ101 | 1/10W 100 | 3 | D0GB101JA002 |
| R7644 | ERJ3GEYD153V | 1/10W 15K | 1 | D0HB153ZA002 |
| R7645 | ERJ3GEYJ473V | 1/10W 47K | 1 | D0GB473JA002 |
| | | | | |
| S7501 | K0F111B00044 | SWITCH,POWER | 1 | |
| | | | | |
| T7501 | ETS13TB119AP | TRANSFORMER | 1 | ⚠ |
| | | | | |
| TU7401 | ENGD6201DR | TV TUNER | 1 | ⚠ |
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| W601-03 | ERJ3GEY0R00V | 1/10W 0 | 3 | |
| W604,05 | ERJ6GEY0R00V | 1/8W 0 | 2 | |
| W606-10 | ERJ3GEY0R00V | 1/10W 0 | 5 | |
| W611 | ERJ6GEY0R00V | 1/8W 0 | 1 | |
| W612-18 | ERJ3GEY0R00V | 1/10W 0 | 7 | |
| W622-24 | ERJ3GEY0R00V | 1/10W 0 | 3 | |
| | | | | |
| X7501 | H0D100500016 | CRYSTAL OSCILLATOR | 1 | |
| X7502 | H0A327200026 | OSCILLATOR | 1 | |
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| ZJ7407,08 | VJR0978 | EARTH ANGLE | 2 | K9ZZ00000424 |
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| • | 03 | RFKBE95HP | | (DIGITAL P.C.B.) |
| | | | | |
| C3401 | ECJ1VB0J105K | 6.3V 1U | 1 | |
| C3402 | ECJ0EC1H220J | 50V 22P | 1 | |
| C3403 | ECJ0EB1A104K | 10V 0.1U | 1 | |
| C3404,05 | ECJ0EC1H220J | 50V 22P | 2 | |
| C3406 | ECJ0EB1A104K | 10V 0.1U | 1 | |
| C3407,08 | ECJ0EC1H100D | 50V 10P | 2 | |

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|---|---|---|---|---|
| C3410 | ECJ0EB1C103K | 16V 0.01U | 1 | |
| C3411 | ECST0JX476R | 6.3V 47U | 1 | |
| C3413 | ECJ0EB1A104K | 10V 0.1U | 1 | |
| C3417-19 | ECJ1VB0J105K | 6.3V 1U | 3 | |
| C3420 | ECJ0EB1C103K | 16V 0.01U | 1 | |
| C3421 | ECJ0EB1A104K | 10V 0.1U | 1 | |
| C3422 | ECJ0EB1C103K | 16V 0.01U | 1 | |
| C3423-28 | ECJ0EB1A104K | 10V 0.1U | 6 | |
| C3429,30 | ECJ2FB0J106K | 6.3V 10U | 2 | |
| C3431 | ECJ0EB1A104K | 10V 0.1U | 1 | |
| C3432 | ECJ1VB0J105K | 6.3V 1U | 1 | |
| C3433 | ECJ0EB1A104K | 10V 0.1U | 1 | |
| C3435,36 | ECJ0EB1A104K | 10V 0.1U | 2 | |
| C3440 | EEEHB0J101P | 6.3V 100P | 1 | |
| C3441 | ECJ0EB1A104K | 10V 0.1U | 1 | |
| C3502 | ECJ0EB1C103K | 16V 0.01U | 1 | |
| C4411 | ECST1AY106R | 10V 10U | 1 | |
| C4412 | EEEHB0J470R | 6.3V 47P | 1 | |
| C4413 | EEEHB0J101P | 6.3V 100P | 1 | |
| C4414,15 | ECJ0EF1C104Z | 16V 0.1U | 2 | |
| C4416 | F2H0J331A016 | 6.3V 330U | 1 | |
| C4417 | ECJ0EF1C104Z | 16V 0.1U | 1 | |
| C4418 | EEEHB0J101P | 6.3V 100P | 1 | |
| C4421-26 | ECJ0EB1E102K | 25V 1000P | 6 | |
| C4427 | EEEHB0J470R | 6.3V 47P | 1 | |
| C4428 | ECJ0EF1C104Z | 16V 0.1U | 1 | |
| C4429 | ECJ0EB1A104K | 10V 0.1U | 1 | |
| C4430 | ECST1AY106R | 10V 10U | 1 | |
| C4431,32 | ECJ0EF1C104Z | 16V 0.1U | 2 | |
| C4433 | EEEHB1C100R | 16V 10P | 1 | |
| C4434 | ECJ0EF1C104Z | 16V 0.1U | 1 | |
| C6001 | ECJ0EF1C104Z | 16V 0.1U | 1 | |
| C6002 | ECJ2FB0J106K | 6.3V 10U | 1 | |
| C6003 | ECJ0EB1C103K | 16V 0.01U | 1 | |
| C9001,02 | ECJ0EC1H470J | 50V 47P | 2 | |
| C37002,03 | ECJ0EF1C104Z | 16V 0.1U | 2 | |
| C37004,05 | ECUM1H080DCQ | 50V 80P | 2 | |
| C37006 | ECJ0EB1H271K | 25V 270P | 1 | |
| C37007 | ECJ0EB1A104K | 10V 0.1U | 1 | |

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|---|---|---|---|---|
| C37008 | ECJ1VB0J105K | 6.3V 1U | 1 | |
| C37009 | EEEHB0J470R | 6.3V 47P | 1 | |
| C50001 | ECJ1VB0J105K | 6.3V 1U | 1 | |
| C50002 | ECJ3YB0J226M | 6.3V 22U | 1 | |
| C50003 | ECJ0EF1C104Z | 16V 0.1U | 1 | |
| C50004,05 | ECJ0EB1A104K | 10V 0.1U | 2 | |
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| D3401,02 | MA3S132E0L | DIODE | 2 | |
| D4401 | MA3Z142K0LG | DIODE | 1 | |
| | | | | |
| FL3401,02 | F1H0J4740004 | FILTER | 2 | |
| FL3404 | F1H0J4740004 | FILTER | 1 | |
| FL3406,07 | F1H0J4740004 | FILTER | 2 | |
| FL3409-12 | F1H0J4740004 | FILTER | 4 | |
| FL3414-26 | F1H0J4740004 | FILTER | 13 | |
| FL3429 | F1H0J4740004 | FILTER | 1 | |
| FL3431 | F1H0J4740004 | FILTER | 1 | |
| FL3433-35 | F1H0J4740004 | FILTER | 3 | |
| FL3501,02 | F1H0J4740004 | FILTER | 2 | |
| FL3505-16 | F1H0J4740004 | FILTER | 12 | |
| FL4403-05 | F1H0J4740004 | FILTER | 3 | |
| FL6001-18 | F1H0J4740004 | FILTER | 18 | |
| FL6020-23 | F1H0J4740004 | FILTER | 4 | |
| FL6701-03 | F1H0J4740004 | FILTER | 3 | |
| FL37001-08 | F1H0J4740004 | FILTER | 8 | |
| FL37010-13 | F1H0J4740004 | FILTER | 4 | |
| FL50001-06 | F1H0J4740004 | FILTER | 6 | |
| | | | | |
| FP3501 | K1MN40A00022 | CONNECTOR(40P) | 1 | |
| | | | | |
| IC3401 | AN13310BAVB | IC | 1 | |
| IC3402 | C3ABMG000092 | IC | 1 | |
| IC3404 | MN85573R | IC | 1 | |
| IC3406 | C1DB00001110 | IC | 1 | |
| IC3408 | C3ABPJ000052 | IC | 1 | |
| IC3409 | C0DBZGC00066 | IC | 1 | |
| IC3501 | MN88302R | IC | 1 | |
| IC3502 | C3ABRG000036 | IC | 1 | |
| IC4404 | C0FBBK000035 | IC | 1 | |

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|---|---|---|---|---|
| IC4406 | C0FBAK000008 | IC | 1 | |
| IC4407 | C0JBAA000257 | IC | 1 | |
| IC4408 | C0JBAD000107 | IC | 1 | |
| IC4409 | C0CBCBD00002 | IC | 1 | |
| IC6001 | MN2DS0011-HR | IC | 1 | |
| IC6002 | C0EBE0000130 | IC | 1 | |
| IC6003 | C3CBLD000091 | IC | 1 | |
| IC6004 | 74LVC244APWL | IC | 1 | C0JBAZ001466 |
| IC6005,06 | C3ABRG000036 | IC | 2 | |
| IC6701 | C1ZBZ0002433 | IC | 1 | |
| IC6703 | RFKBE95HP | DIGITAL P.C.B. | 1 | |
| IC37001 | MN673748YDR | IC | 1 | |
| IC37003,04 | C0JBAR000332 | IC | 2 | |
| IC37005 | C3ABMG000193 | IC | 1 | |
| IC50001,02 | C3ABPG000067 | IC | 2 | |
| IC50003 | C0JBAB000474 | IC | 1 | |
| | | | | |
| LB3404,05 | J0JHC0000032 | COIL | 2 | |
| LB3408,09 | J0JHC0000032 | COIL | 2 | |
| LB3501 | J0JHC0000032 | COIL | 1 | |
| LB3502,03 | J0JHC0000045 | COIL | 2 | |
| LB4401-04 | J0JGC0000020 | COIL | 4 | |
| LB4405 | J0JHC0000032 | COIL | 1 | |
| LB6001-04 | J0JHC0000032 | COIL | 4 | |
| LB9001,02 | J0JHC0000032 | COIL | 2 | |
| LB9006,07 | J0JCC0000103 | COIL | 2 | |
| LB9008 | J0JHC0000045 | COIL | 1 | |
| LB9009 | J0JHC0000046 | COIL | 1 | |
| LB37001 | J0JHC0000032 | COIL | 1 | |
| LB50001-05 | J0JHC0000032 | COIL | 5 | |
| | | | | |
| P3501 | K1KA70A00039 | CONNECTOR(70P) | 1 | |
| P6002 | K1KA06A00394 | CONNECTOR(6P) | 1 | |
| P9001 | K1KB88A00002 | CONNECTOR(88P) | 1 | |
| | | | | |
| PS37001 | K1KB06A00090 | CONNECTOR(6P) | 1 | |
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| Q6001,02 | B1ABCF000114 | TRANSISTOR | 2 | |
| Q6701-05 | B1ABCF000114 | TRANSISTOR | 5 | |

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|---|---|---|---|---|
| Q50001-05 | B1ADCF000081 | TRANSISTOR | 5 | |
| | | | | |
| QR3502,03 | UN5213TX | TRANSISTOR | 2 | UNR521300L |
| | | | | |
| R3405 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R3407 | ERJ2GE0R00X | 1/16W 0 | 1 | |
| R3409 | ERJ2GE0R00X | 1/16W 0 | 1 | |
| R3410,11 | ERJ2GEJ101 | 1/16W 100 | 2 | |
| R3412 | ERJ2GEJ220X | 1/16W 22 | 1 | ERJ2RMJ220X |
| R3414 | ERJ2GEJ330X | 1/16W 33 | 1 | |
| R3416 | ERJ2GEJ472X | 1/16W 4.7K | 1 | ERJ2RMJ472X |
| R3417,18 | ERJ2GEJ103 | 1/16W 10K | 2 | |
| R3419-23 | ERJ2GEJ220X | 1/16W 22 | 5 | ERJ2RMJ220X |
| R3427 | ERJ2GEJ220X | 1/16W 22 | 1 | ERJ2RMJ220X |
| R3430 | ERJ2GEJ220X | 1/16W 22 | 1 | ERJ2RMJ220X |
| R3432-34 | ERJ2GEJ220X | 1/16W 22 | 3 | ERJ2RMJ220X |
| R3435,36 | ERJ2GEJ470 | 1/16W 47 | 2 | |
| R3440 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R3442 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R3443-45 | ERJ2GE0R00X | 1/16W 0 | 3 | |
| R3446 | ERJ2GEJ181 | 1/16W 180 | 1 | |
| R3447 | ERJ2RHD682 | 1/16W 6.8K | 1 | |
| R3448 | ERJ2GEJ562X | 1/16W 5.6K | 1 | |
| R3449 | ERJ2RHD682 | 1/16W 6.8K | 1 | |
| R3450 | ERJ2GEJ104 | 1/16W 100K | 1 | |
| R3451 | ERJ2GEJ220X | 1/16W 22 | 1 | ERJ2RMJ220X |
| R3452 | ERJ2GE0R00X | 1/16W 0 | 1 | |
| R3453 | ERJ2GEJ220X | 1/16W 22 | 1 | ERJ2RMJ220X |
| R3454 | ERJ2GEJ390X | 1/16W 39 | 1 | ERJ2RMJ390X |
| R3455 | ERJ2GEJ151 | 1/16W 150 | 1 | |
| R3456 | ERJ2GEJ680X | 1/16W 68 | 1 | ERJ2RMJ680X |
| R3457 | ERJ2GEJ100 | 1/16W 10 | 1 | |
| R3458,59 | ERJ2GEJ181 | 1/16W 180 | 2 | |
| R3460-62 | ERJ2GEJ470 | 1/16W 47 | 3 | |
| R3463,64 | ERJ2GE0R00X | 1/16W 0 | 2 | |
| R3472,73 | ERJ2GEJ220X | 1/16W 22 | 2 | ERJ2RMJ220X |
| R3476 | ERJ2GEJ102X | 1/16W 1K | 1 | ERJ2RMJ102X |
| R3501-03 | ERJ2GEJ220X | 1/16W 22 | 3 | ERJ2RMJ220X |
| R3504 | ERJ2GEJ473X | 1/16W 47K | 1 | ERJ2RMJ473X |

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|---|---|---|---|---|
| R3505-09 | ERJ2GEJ330X | 1/16W 33 | 5 | |
| R3510,11 | ERJ2GEJ103 | 1/16W 10K | 2 | |
| R3513 | ERJ2GEJ330X | 1/16W 33 | 1 | |
| R3514 | ERJ2GEJ105 | 1/16W 1M | 1 | |
| R3515 | ERJ2GEJ330X | 1/16W 33 | 1 | |
| R3516 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R3517 | ERJ2GEJ330X | 1/16W 33 | 1 | |
| R3519-22 | ERJ2GEJ330X | 1/16W 33 | 4 | |
| R3523 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R3524 | ERJ2GEJ330X | 1/16W 33 | 1 | |
| R3525 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R3526-28 | ERJ2GEJ220X | 1/16W 22 | 3 | ERJ2RMJ220X |
| R3530 | ERJ2GEJ102X | 1/16W 1K | 1 | ERJ2RMJ102X |
| R3531 | ERJ2GEJ820X | 1/16W 82 | 1 | |
| R3532 | ERJ2GEJ472X | 1/16W 4.7K | 1 | ERJ2RMJ472X |
| R3533 | ERJ2GEJ101 | 1/16W 100 | 1 | |
| R3535 | ERJ2GEJ820X | 1/16W 82 | 1 | |
| R3537 | ERJ2GEJ562X | 1/16W 5.6K | 1 | |
| R3540 | ERJ2GEJ473X | 1/16W 47K | 1 | ERJ2RMJ473X |
| R3541,42 | ERJ2GEJ103 | 1/16W 10K | 2 | |
| R3543 | ERJ2GE0R00X | 1/16W 0 | 1 | |
| R3548 | ERJ2GEJ330X | 1/16W 33 | 1 | |
| R4418-27 | ERJ2GE0R00X | 1/16W 0 | 10 | |
| R4428 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| R4433-35 | ERJ3GEY0R00V | 1/10W 0 | 3 | |
| R4436 | ERJ2GEJ221 | 1/16W 220 | 1 | |
| R4437 | ERJ2GE0R00X | 1/16W 0 | 1 | |
| R4438 | ERJ2GEJ470 | 1/16W 47 | 1 | |
| R4439 | ERJ2GE0R00X | 1/16W 0 | 1 | |
| R4450-52 | ERJ2GE0R00X | 1/16W 0 | 3 | |
| R4453 | ERJ2GEJ562X | 1/16W 5.6K | 1 | |
| R4454-57 | ERJ2GE0R00X | 1/16W 0 | 4 | |
| R6001 | ERJ2GEJ333X | 1/16W 33K | 1 | ERJ2RMJ333X |
| R6002 | ERJ2GEJ332X | 1/16W 3.3K | 1 | ERJ2RMJ332X |
| R6003 | ERJ2GEJ102X | 1/16W 1K | 1 | ERJ2RMJ102X |
| R6004 | ERJ2GEJ472X | 1/16W 4.7K | 1 | ERJ2RMJ472X |
| R6005 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R6006 | ERJ2GEJ153 | 1/16W 15K | 1 | |
| R6007 | ERJ2GEJ472X | 1/16W 4.7K | 1 | ERJ2RMJ472X |

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|---|---|---|---|---|
| R6008 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R6009,10 | ERJ2GEJ330X | 1/16W 33 | 2 | |
| R6011 | ERJ2GEJ332X | 1/16W 3.3K | 1 | ERJ2RMJ332X |
| R6013 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R6014-17 | ERJ2GEJ104 | 1/16W 100K | 4 | |
| R6018,19 | ERJ2GEJ220X | 1/16W 22 | 2 | ERJ2RMJ220X |
| R6020 | ERJ2GEJ100 | 1/16W 10 | 1 | |
| R6021,22 | ERJ2GEJ470 | 1/16W 47 | 2 | |
| R6023 | ERJ2GEJ332X | 1/16W 3.3K | 1 | ERJ2RMJ332X |
| R6024 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R6028 | ERJ2GEJ470 | 1/16W 47 | 1 | |
| R6029 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R6031 | ERJ2GEJ470 | 1/16W 47 | 1 | |
| R6035 | ERJ2GEJ470 | 1/16W 47 | 1 | |
| R6036 | ERJ2GEJ332X | 1/16W 3.3K | 1 | ERJ2RMJ332X |
| R6037 | ERJ2GEJ333X | 1/16W 33K | 1 | ERJ2RMJ333X |
| R6039 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R6040 | ERJ2GEJ332X | 1/16W 3.3K | 1 | ERJ2RMJ332X |
| R6701 | ERJ2GEJ104 | 1/16W 100K | 1 | |
| R6703 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R6706,07 | ERJ2GEJ470 | 1/16W 47 | 2 | |
| R6709,10 | ERJ2GEJ332X | 1/16W 3.3K | 2 | ERJ2RMJ332X |
| R6711,12 | ERJ2GEJ470 | 1/16W 47 | 2 | |
| R6713 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R6714 | ERJ2GEJ333X | 1/16W 33K | 1 | ERJ2RMJ333X |
| R6715 | ERJ2GEJ470 | 1/16W 47 | 1 | |
| R6716,17 | ERJ2GEJ333X | 1/16W 33K | 2 | ERJ2RMJ333X |
| R6718 | ERJ2GE0R00X | 1/16W 0 | 1 | |
| R6720-28 | ERJ2GEJ470 | 1/16W 47 | 9 | |
| R6729 | ERJ2GEJ104 | 1/16W 100K | 1 | |
| R6730 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R6731 | ERJ2GEJ222X | 1/16W 22K | 1 | ERJ2RMJ222X |
| R6733 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R6735 | ERJ2GEJ472X | 1/16W 4.7K | 1 | ERJ2RMJ472X |
| R6737,38 | ERJ2GEJ470 | 1/16W 47 | 2 | |
| R6739 | ERJ2GEJ102X | 1/16W 1K | 1 | ERJ2RMJ102X |
| R6750,51 | ERJ2GEJ470 | 1/16W 47 | 2 | |
| R6752 | ERJ2GEJ101 | 1/16W 100 | 1 | |
| R6753-56 | ERJ2GEJ470 | 1/16W 47 | 4 | |

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|---|---|---|---|---|
| R37001,02 | ERJ2GEJ220X | 1/16W 22 | 2 | ERJ2RMJ220X |
| R37003-07 | ERJ2GE0R00X | 1/16W 0 | 5 | |
| R37008 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R37009,10 | ERJ2GEJ220X | 1/16W 22 | 2 | ERJ2RMJ220X |
| R37011 | ERJ2GE0R00X | 1/16W 0 | 1 | |
| R37012 | D0HB113ZA002 | 1/10W 11K | 1 | |
| R37013 | ERJ2GE0R00X | 1/16W 0 | 1 | |
| R37014 | ERJ2GEJ105 | 1/16W 1M | 1 | |
| R37015 | ERJ2GE0R00X | 1/16W 0 | 1 | |
| R37016 | ERJ2GEJ220X | 1/16W 22 | 1 | ERJ2RMJ220X |
| R37017 | ERJ3RED560V | 1/16W 56 | 1 | |
| R37018 | ERJ3RBD512 | 1/16W 5.1K | 1 | |
| R37019-21 | ERJ3RED560V | 1/16W 56 | 3 | |
| R37022 | D0HB301ZA002 | 1/10W 300 | 1 | |
| R37023 | ERJ2GE0R00X | 1/16W 0 | 1 | |
| R50001 | ERJ2GEJ390X | 1/16W 39 | 1 | ERJ2RMJ390X |
| R50002 | ERJ2GEJ100 | 1/16W 10 | 1 | |
| R50003 | ERJ2GEJ390X | 1/16W 39 | 1 | ERJ2RMJ390X |
| R50004 | ERJ2GE0R00X | 1/16W 0 | 1 | |
| R50005 | ERJ2GEJ330X | 1/16W 33 | 1 | |
| R50006,07 | ERJ2GEJ470 | 1/16W 47 | 2 | |
| R50008 | ERJ2GEJ100 | 1/16W 10 | 1 | |
| R50009 | ERJ2GEJ103 | 1/16W 10K | 1 | |
| R50010 | ERJ2RHD332 | 1/16W 3.3K | 1 | |
| R50011 | ERJ2RHD223X | 1/16W 22K | 1 | |
| R50012 | ERJ2GEJ100 | 1/16W 10 | 1 | |
| R50014 | ERJ2GEJ470 | 1/16W 47 | 1 | |
| R50015 | ERJ2RHD333 | 1/16W 33K | 1 | |
| R50016 | ERJ2RHD152 | 1/16W 1.5K | 1 | |
| R50017 | ERJ2RHD153 | 1/16W 15K | 1 | |
| R50018 | ERJ3RBD151 | 1/16W 150 | 1 | |
| R50019 | ERJ2GEJ330X | 1/16W 33 | 1 | |
| R50020 | ERJ2GEJ102X | 1/16W 1K | 1 | ERJ2RMJ102X |
| R50021 | ERJ3RED820 | 1/16W 82 | 1 | |
| R50022 | ERJ2GEJ330X | 1/16W 33 | 1 | |
| R50023 | ERJ2GEJ102X | 1/16W 1K | 1 | ERJ2RMJ102X |
| R50024 | ERJ3RED820 | 1/16W 82 | 1 | |
| R50025 | ERJ2GEJ330X | 1/16W 33 | 1 | |
| R50026 | ERJ2GEJ102X | 1/16W 1K | 1 | ERJ2RMJ102X |

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|---|---|---|---|---|
| R50027 | ERJ3RBD151 | 1/16W 150 | 1 | |
| R50028 | ERJ2GEJ330X | 1/16W 33 | 1 | |
| R50029 | ERJ2GEJ102X | 1/16W 1K | 1 | ERJ2RMJ102X |
| R50030 | ERJ3RED330 | 1/16W 33 | 1 | |
| R50031 | ERJ3RBD151 | 1/16W 150 | 1 | |
| R50032 | ERJ2GEJ330X | 1/16W 33 | 1 | |
| R50033 | ERJ2GEJ102X | 1/16W 1K | 1 | ERJ2RMJ102X |
| R50034,35 | ERJ3RED220 | 1/16W 22 | 2 | |
| R50036-38 | ERJ2GEJ470 | 1/16W 47 | 3 | |
| R50039 | ERJ2GEJ820X | 1/16W 82 | 1 | |
| | | | | |
| RX3401-07 | D1H82204A024 | RESISTOR-RESISTOR | 7 | |
| RX3409-16 | D1H82204A024 | RESISTOR-RESISTOR | 8 | |
| RX3421,22 | D1H82204A024 | RESISTOR-RESISTOR | 2 | |
| RX3433-44 | D1H82204A024 | RESISTOR-RESISTOR | 12 | |
| RX3501-04 | D1H82204A024 | RESISTOR-RESISTOR | 4 | |
| RX3505-19 | D1H83304A024 | RESISTOR-RESISTOR | 15 | |
| RX3520-26 | D1H82204A024 | RESISTOR-RESISTOR | 7 | |
| RX3527-32 | D1H81034A024 | RESISTOR-RESISTOR | 6 | |
| RX3533-36 | D1H83304A024 | RESISTOR-RESISTOR | 4 | |
| RX3537-40 | D1H84734A024 | RESISTOR-RESISTOR | 4 | |
| RX6001 | D1H81034A024 | RESISTOR-RESISTOR | 1 | |
| RX6002-04 | D1H84704A024 | RESISTOR-RESISTOR | 3 | |
| RX6005,06 | D1H83304A024 | RESISTOR-RESISTOR | 2 | |
| RX6007 | D1H84704A024 | RESISTOR-RESISTOR | 1 | |
| RX6009-26 | D1H83304A024 | RESISTOR-RESISTOR | 18 | |
| RX6027-32 | D1H84704A024 | RESISTOR-RESISTOR | 6 | |
| RX6033,34 | D1H83324A013 | RESISTOR-RESISTOR | 2 | |
| RX6035,36 | D1H83334A024 | RESISTOR-RESISTOR | 2 | |
| RX6037 | D1H81034A024 | RESISTOR-RESISTOR | 1 | |
| RX6038 | D1H83304A024 | RESISTOR-RESISTOR | 1 | |
| RX6039-42 | D1H84704A024 | RESISTOR-RESISTOR | 4 | |
| RX6043 | D1H81034A024 | RESISTOR-RESISTOR | 1 | |
| RX6044 | D1H83334A024 | RESISTOR-RESISTOR | 1 | |
| RX6701,02 | D1H81034A024 | RESISTOR-RESISTOR | 2 | |
| RX6703-06 | D1H84704A024 | RESISTOR-RESISTOR | 4 | |
| RX6708 | D1H84704A024 | RESISTOR-RESISTOR | 1 | |
| RX6711-13 | D1H83324A013 | RESISTOR-RESISTOR | 3 | |
| RX6716 | D1H84704A024 | RESISTOR-RESISTOR | 1 | |

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|---|---|---|---|---|
| RX6717-19 | D1H83334A024 | RESISTOR-RESISTOR | 3 | |
| RX6720-23 | D1H83324A013 | RESISTOR-RESISTOR | 4 | |
| RX6724 | D1H84704A024 | RESISTOR-RESISTOR | 1 | |
| RX6726-28 | D1H84704A024 | RESISTOR-RESISTOR | 3 | |
| RX6729,30 | D1H81034A024 | RESISTOR-RESISTOR | 2 | |
| RX6731-34 | D1H84704A024 | RESISTOR-RESISTOR | 4 | |
| RX6735 | D1H82224A024 | RESISTOR-RESISTOR | 1 | |
| RX6736 | D1H81034A024 | RESISTOR-RESISTOR | 1 | |
| RX6737 | D1H84724A024 | RESISTOR-RESISTOR | 1 | |
| RX6738 | D1H83334A024 | RESISTOR-RESISTOR | 1 | |
| RX37003-10 | D1H82204A024 | RESISTOR-RESISTOR | 8 | |
| RX37014,15 | D1H82204A024 | RESISTOR-RESISTOR | 2 | |
| RX50001-16 | D1H84704A024 | RESISTOR-RESISTOR | 16 | |
| | | | | |
| T37001 | J0JBD0000043 | TRANSFORMER | 1 | ⚠ |
| | | | | |
| X3401 | H0J270500069 | CRYSTAL OSCILLATOR | 1 | |
| X3501 | H2D330500001 | CRYSTAL OSCILLATOR | 1 | |
| X37001 | H0J245500054 | CRYSTAL OSCILLATOR | 1 | |
| | | | | |
| • | 04 | REP3763A | | (IR P.C.B.) |
| | | | | |
| C8001,02 | ECJ1VC1H120J | 50V 12P | 2 | |
| C8003 | ECJ1XB1C104K | 16V 0.1U | 1 | |
| C8004 | ECJ1VC1H101J | 50V 100P | 1 | |
| C8005 | EEEHB0J470R | 6.3V 47P | 1 | |
| C8006-08 | ECJ1XB1C104K | 16V 0.1U | 3 | |
| C8010 | ECJ1VC1H101J | 50V 100P | 1 | |
| C8012 | ECJ1XB1C104K | 16V 0.1U | 1 | |
| | | | | |
| IC8001 | C2CBHG000144 | IC | 1 | |
| IC8002 | C0EBJ0000319 | IC | 1 | |
| | | | | |
| JK8001 | K2HC104B0028 | JACK,G-LINK | 1 | |
| | | | | |
| LB8001 | J0JHC0000032 | COIL | 1 | |
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| P8001 | VJS3042F008W | CONNECTOR(8P) | 1 | K1KB08B00028 |
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|---|---|---|---|---|
| Q8001-03 | 2SD0601A | TRANSISTOR | 3 | |
| Q8004 | 2SD132800L | TRANSISTOR | 1 | |
| Q8005 | 2SB071000L | TRANSISTOR | 1 | |
| | | | | |
| R8001 | ERJ3GEYJ103V | 1/10W 10K | 1 | D0GB103JA002 |
| R8002-05 | ERJ3GEYJ101 | 1/10W 100 | 4 | D0GB101JA002 |
| R8006 | ERJ3GEYJ103V | 1/10W 10K | 1 | D0GB103JA002 |
| R8009 | ERJ3GEYD274V | 1/10W 270K | 1 | ERA3YKD274V |
| R8010 | ERJ3GEYJ752V | 1/10W 7.5K | 1 | |
| R8012 | ERJ3GEYJ102V | 1/10W 1K | 1 | |
| R8013 | ERJ3GEYJ472V | 1/10W 4.7K | 1 | |
| R8016 | ERJ3GEYJ103V | 1/10W 10K | 1 | D0GB103JA002 |
| R8017 | ERJ6GEYJ241V | 1/8W 240 | 1 | |
| R8018 | ERJ3GEYJ220V | 1/10W 22 | 1 | |
| R8019 | ERJ3GEYJ752V | 1/10W 7.5K | 1 | |
| R8021 | ERJ3GEYJ103V | 1/10W 10K | 1 | D0GB103JA002 |
| R8023 | ERJ3GEYJ473V | 1/10W 47K | 1 | D0GB473JA002 |
| R8024 | ERJ3GEYJ752V | 1/10W 7.5K | 1 | |
| R8028 | ERJ3GEYJ103V | 1/10W 10K | 1 | D0GB103JA002 |
| R8029 | ERJ6GEYJ241V | 1/8W 240 | 1 | |
| R8030,31 | ERJ3GEYJ221V | 1/10W 220 | 2 | |
| R8035 | ERJ3GEYJ103V | 1/10W 10K | 1 | D0GB103JA002 |
| R8036 | ERJ3GEY0R00V | 1/10W 0 | 1 | |
| R8041 | ERJ3GEYJ103V | 1/10W 10K | 1 | D0GB103JA002 |
| | | | | |
| X8001 | H0J160500027 | OSCILLATOR | 1 | |
| | | | | |
| ZJ8001 | VMC1359 | EARTH SPRING | 1 | ⚠ |
| | | | | |
| • | 05 | REP3713D | | (FRONT(R) P.C.B.) |
| | | | | |
| C7801 | ECJ1VF1A105Z | 10V 1U | 1 | |
| | | | | |
| D7801-05 | SLR-325MG | LED | 5 | B3ABA0000109 |
| D7806 | B3ACA0000252 | LED | 1 | |
| | | | | |
| IR7801 | B3RAD0000071 | REMOTE SENSOR | 1 | |
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| P7801 | K1KA12B00136 | CONNECTOR(12P) | 1 | |

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|---|---|---|---|---|
| QR7801-06 | UN2214 | TRANSISTOR | 6 | UNR2214 |
| | | | | |
| R7801 | ERDS2FJ330 | 1/4W 33 | 1 | |
| R7802-06 | ERJ3GEYJ221V | 1/10W 220 | 5 | |
| R7807 | ERJ3GEYJ391V | 1/10W 390 | 1 | |
| R7809 | ERJ3RBD272 | 1/16W 2.7K | 1 | |
| R7817 | ERJ3RBD272 | 1/16W 2.7K | 1 | |
| R7818 | ERJ3RBD222V | 1/16W 2.2K | 1 | |
| R7819 | ERA3YED332 | 1/16W 3.3K | 1 | |
| R7825 | ERJ3RBD272 | 1/16W 2.7K | 1 | |
| R7826 | ERJ3RBD222V | 1/16W 2.2K | 1 | |
| R7827 | ERA3YED332 | 1/16W 3.3K | 1 | |
| R7828 | ERJ3RBD562V | 1/16W 5.6K | 1 | |
| | | | | |
| S7801 | EVQ11G07K | SWITCH,OPEN/CLOSE | 1 | |
| S7802 | EVQ11G07K | SWITCH,SKIP-F | 1 | |
| S7809 | EVQ11G07K | SWITCH,CH-DOWN | 1 | |
| S7811 | EVQ11G07K | SWITCH,REC | 1 | |
| S7812 | EVQ11G07K | SWITCH,STOP | 1 | |
| S7813 | EVQ11G07K | SWITCH,SKIP-R | 1 | |
| S7819 | EVQ11G07K | SWITCH,CH-UP | 1 | |
| S7820 | EVQ11G07K | SWITCH,TIME WARP | 1 | |
| S7821 | EVQ11G07K | SWITCH,PLAY | 1 | |
| S7822 | EVQ11G07K | SWITCH,SELECT | 1 | |
| | | | | |
| • | 06 | VEP73115A | | (SD CARD P.C.B.) |
| | | | | |
| C6801-06 | ECJ1XB1C104K | 16V 0.1U | 6 | |
| C6808-10 | ECJ1XB1C104K | 16V 0.1U | 3 | |
| C6811,12 | ECJ1VB1H103K | 50V 0.01U | 2 | |
| C6813 | EEEHB1C470P | 16V 47P | 1 | |
| C6814 | EEEHB0J101P | 6.3V 100P | 1 | |
| C6815 | ECJ1VB1H103K | 50V 0.01U | 1 | |
| | | | | |
| FL6801,02 | F1H0J4740004 | FILTER | 2 | |
| FL6804-08 | F1H0J4740004 | FILTER | 5 | |
| | | | | |
| IC6801 | C0JBAE000098 | IC | 1 | |

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|---|---|---|---|---|
| IC6802 | C0JBAZ002138 | IC | 1 | |
| IC6803 | C0JBAZ002103 | IC | 1 | |
| IC6804 | C0JBAZ002059 | IC | 1 | |
| IC6805 | C0JBAZ002139 | IC | 1 | |
| IC6806 | C0JBAZ000608 | IC | 1 | |
| IC6807 | C0CBCDG00004 | IC | 1 | |
| IC6809 | C0EBJ0000153 | IC | 1 | |
| | | | | |
| LB6801 | J0JHC0000032 | COIL | 1 | |
| LB6802-04 | J0JHC0000045 | COIL | 3 | |
| | | | | |
| P6801 | K1KB70A00038 | CONNECTOR(70P) | 1 | |
| P6802 | K1NA68E00076 | CONNECTOR(68P) | 1 | |
| P6803 | K1NA09E00051 | CONNECTOR(9P) | 1 | |
| P6804 | K1KA06B00177 | CONNECTOR(6P) | 1 | |
| | | | | |
| Q6801 | UN5213TX | TRANSISTOR | 1 | UNR521300L |
| | | | | |
| QR6801 | UN5211 | TRANSISTOR | 1 | UNR5211 |
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| R6801,02 | ERJ3GEYJ330V | 1/10W 33 | 2 | D0GB330JA002 |
| R6803 | ERJ3GEYJ222V | 1/10W 2.2K | 1 | D0GB222JA002 |
| R6804,05 | ERJ3GEYJ473V | 1/10W 47K | 2 | D0GB473JA002 |
| R6806 | ERJ3GEYJ104 | 1/10W 100K | 1 | |
| R6807 | ERJ3GEYJ473V | 1/10W 47K | 1 | D0GB473JA002 |
| R6808 | ERJ3GEYJ101 | 1/10W 100 | 1 | D0GB101JA002 |
| R6809 | ERJ3GEYJ222V | 1/10W 2.2K | 1 | D0GB222JA002 |
| R6810,11 | ERJ3GEYJ220V | 1/10W 22 | 2 | |
| R6812,13 | ERJ3GEYJ223V | 1/10W 22K | 2 | D0GB223JA002 |
| R6814 | ERJ3GEYJ103V | 1/10W 10K | 1 | D0GB103JA002 |
| R6815-18 | ERJ3GEYJ223V | 1/10W 22K | 4 | D0GB223JA002 |
| R6819 | ERJ3GEYJ103V | 1/10W 10K | 1 | D0GB103JA002 |
| R6820-23 | ERJ3GEYJ223V | 1/10W 22K | 4 | D0GB223JA002 |
| R6826,27 | ERJ3GEYJ223V | 1/10W 22K | 2 | D0GB223JA002 |
| R6828 | ERJ3GEYJ123V | 1/10W 12K | 1 | |
| | | | | |
| RX6801-12 | D1H83304A024 | RESISTOR-RESISTOR | 12 | |
| RX6813 | D1H82204A024 | RESISTOR-RESISTOR | 1 | |
| RX6814-17 | D1H84734A024 | RESISTOR-RESISTOR | 4 | |

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|---|---|---|---|---|
| RX6818 | D1H81234A024 | RESISTOR-RESISTOR | 1 | |
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| • | 07 | VEP73116A | | (DV JACK P.C.B.) |
| | | | | |
| P37001 | K1KA06B00181 | CONNECTOR(6P) | 1 | |
| P37002 | K2HZ104B0012 | CONNECTOR(104P) | 1 | |
| | | | | |
| • | 08 | ETXMM508A4F | | (POWER SUPPLY P.C.B.) |
| | | | | |
| C001 | ECKENA471KBR | 470P | 1 | ⚠ |
| C002,03 | ECQU2A104ML | 0.1U | 2 | ⚠ |
| C006 | ECKENA471KBR | 470P | 1 | ⚠ |
| C008 | 250E102M | 1000P | 1 | ⚠ |
| C009 | KMM220271Z | 220V 270U | 1 | |
| C010 | RR3DD471K | 2KV 470P | 1 | |
| C011 | ECKENA152MER | 1500P | 1 | ⚠ |
| C012 | MBC471J5 | 50V 470P | 1 | |
| C013 | KY1H220 | 50V 22U | 1 | |
| C014 | MBB224K2 | 25V 0.22U | 1 | |
| C101 | MBC101K2D | 200V 100P | 1 | |
| C102 | ECJ2XB1H102K | 50V 1000P | 1 | ECJ2VB1H102K |
| C103 | MBC101K2D | 200V 100P | 1 | |
| C104 | ECJ2XB1H102K | 50V 1000P | 1 | ECJ2VB1H102K |
| C105 | ECA1EHG102 | 25V 1000U | 1 | |
| C106 | KY1A392 | 10V 3900U | 1 | |
| C107 | ECJ2VC1H102J | 50V 1000P | 1 | |
| C109 | MBB104K2 | 25V 0.1U | 1 | |
| C110 | MBB474K1 | 16V 0.47U | 1 | |
| C111 | MBB105K1 | 16V 1U | 1 | |
| C112 | KY1A471 | 10V 470U | 1 | |
| C113 | MBB105K1 | 16V 1U | 1 | |
| C115 | TBB224K5 | 50V 0.22U | 1 | |
| C117 | KY1E681L | 25V 680U | 1 | |
| C118 | KY1H220 | 50V 22U | 1 | |
| C119 | KY1A122 | 10V 1200U | 1 | |
| C120 | KY1E681L | 25V 680U | 1 | |
| C122 | MBB104K2 | 25V 0.1U | 1 | |
| C123 | KY1C471 | 16V 470U | 1 | |

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|---|---|---|---|---|
| C124 | KY1E221 | 25V 220U | 1 | |
| C125 | KY1A222 | 10V 2200U | 1 | |
| C127 | MBB474K1 | 16V 0.47U | 1 | |
| C128 | KY1E681L | 25V 680U | 1 | |
| C129 | MBB105K1 | 16V 1U | 1 | |
| C130 | MBC102J5 | 50V 1000P | 1 | |
| C131 | MBB105K1 | 16V 1U | 1 | |
| C141 | MBB104K2 | 25V 0.1U | 1 | |
| C142 | MBB105K1 | 16V 1U | 1 | |
| C143 | MBB104K2 | 25V 0.1U | 1 | |
| C144 | KY1E221 | 25V 220U | 1 | |
| | | | | |
| D001-04 | GPP20J | DIODE | 4 | ⚠ |
| D005 | ST3D200 | CLAMPER | 1 | |
| D006 | ERA91-02 | DIODE | 1 | B0AAGM000001 |
| D007 | MA2J72800L | DIODE | 1 | |
| D101 | RK49 | DIODE | 1 | B0JAPK000005 |
| D102,03 | FCQ20A6 | DIODE | 2 | |
| D104-08 | MA165TA5 | DIODE | 5 | MA2C16500E |
| D111-13 | MA165TA5 | DIODE | 3 | MA2C16500E |
| D114 | GPP20J | DIODE | 1 | |
| D120 | MA2J11100L | DIODE | 1 | |
| D121 | MA165TA5 | DIODE | 1 | MA2C16500E |
| | | | | |
| F001 | HU-3.15MCT | FUSE | 1 | ⚠ |
| F101 | SBM40 | FUSE | 1 | ⚠ |
| F102,03 | SBM32 | FUSE | 2 | ⚠ |
| | | | | |
| IC001 | STRG6353 | IC | 1 | ⚠ |
| IC101 | TL431AI | IC | 1 | |
| IC102 | LM2904DR | IC | 1 | |
| IC103 | SI3010KM | IC | 1 | |
| IC105 | BD4746G | IC | 1 | |
| IC106 | SI3120J | IC | 1 | |
| IC109 | SI3120J | IC | 1 | |
| | | | | |
| IP101 | ICPN10 | IC PROTECTOR | 1 | ⚠ |
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|---|---|---|---|---|
| L001,02 | ELF15N008A | FILTER | 2 | ⚠ |
| L004 | ELESN680KA | COIL | 1 | |
| L005 | EXCELSA35 | COIL | 1 | |
| L006,07 | EXCELDR35 | COIL | 2 | |
| L101 | EXCELDR35 | COIL | 1 | |
| L102 | LHLZ1R5M | COIL | 1 | |
| L103 | EXCELDR35 | COIL | 1 | |
| L104 | LHLZ6R8M | COIL | 1 | |
| L105 | EXCELSA35 | COIL | 1 | |
| L106 | LH8TB100K | COIL | 1 | |
| L107 | EXCELSA35 | COIL | 1 | |
| L108 | EXCELDR35 | COIL | 1 | |
| L109 | LHLZ4R7M | COIL | 1 | |
| L110 | EXCELSA35 | COIL | 1 | |
| | | | | |
| P001 | M2024 | AC INLET | 1 | ⚠ |
| | | | | |
| PC001 | PS2571L1V | PHOTO COUPLER | 1 | ⚠ |
| | | | | |
| PS101 | B4B-EH-A | CONNECTOR(4P) | 1 | |
| PS102 | TWGP23XA1 | CONNECTOR(23P) | 1 | |
| | | | | |
| Q101 | 2SD602A-R | TRANSISTOR | 1 | 2SD0602AR |
| Q102 | 2SB710AQRSTX | TRANSISTOR | 1 | 2SB0710AWL |
| Q103 | 2SB0709ARL | TRANSISTOR | 1 | |
| Q104 | 2SD601A-R | TRANSISTOR | 1 | 2SD0601AR |
| Q105 | 2SK3366 | TRANSISTOR | 1 | |
| Q106,07 | 2SD601A-R | TRANSISTOR | 2 | 2SD0601AR |
| Q110 | 2SB710AQRSTX | TRANSISTOR | 1 | 2SB0710AWL |
| Q111 | 2SD601A-R | TRANSISTOR | 1 | 2SD0601AR |
| Q113 | 2SK3366 | TRANSISTOR | 1 | |
| Q114 | 2SB710AQRSTX | TRANSISTOR | 1 | 2SB0710AWL |
| Q115,16 | 2SD601A-R | TRANSISTOR | 2 | 2SD0601AR |
| Q117 | 2SB0709ARL | TRANSISTOR | 1 | |
| Q118 | 2SD602A-R | TRANSISTOR | 1 | 2SD0602AR |
| Q119 | 2SB710AQRSTX | TRANSISTOR | 1 | 2SB0710AWL |
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| R001 | ERDS1FJ105 | 0.5W 1M | 1 | |

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|---|---|---|---|---|
| R002 | CR10J681 | 0.1W 680 | 1 | |
| R003 | ERX12SZGR18 | 0.5W 0.18 | 1 | |
| R005 | ERDS2FJ683 | 1/4W 68K | 1 | |
| R006 | ER0S2TKF2373 | 0.25W 237K | 1 | |
| R007 | CR10F3162 | 0.1W 31.6K | 1 | |
| R008 | CR10J562 | 0.1W 5.6K | 1 | |
| R009 | ERDS2FJ683 | 1/4W 68K | 1 | |
| R010 | ER0S2TKF2373 | 0.25W 237K | 1 | |
| R101 | CR10J472 | 0.1W 4.7K | 1 | |
| R102,03 | CR10J100 | 0.1W 10 | 2 | |
| R104 | CR10J471 | 0.1W 470 | 1 | |
| R105 | CR10J472 | 0.1W 4.7K | 1 | |
| R106 | ERJ6GEYJ101V | 1/8W 100 | 1 | |
| R107 | CR10J224 | 0.1W 220K | 1 | |
| R108 | CR10J472 | 0.1W 4.7K | 1 | |
| R109 | CR10J222 | 0.1W 2.2K | 1 | |
| R110 | CR10J103 | 0.1W 10K | 1 | |
| R111 | CR10J752 | 0.1W 7.5K | 1 | |
| R112 | CR10J102 | 0.1W 1K | 1 | |
| R113 | CR10J561 | 0.1W 560 | 1 | |
| R114 | ERJ6GEYJ101V | 1/8W 100 | 1 | |
| R115 | CR10J152 | 0.1W 1.5K | 1 | |
| R116 | CR10J102 | 0.1W 1K | 1 | |
| R117 | ERJ6GEYJ101V | 1/8W 100 | 1 | |
| R120 | CR10F2210 | 0.1W 221 | 1 | |
| R121 | CR10F1001 | 0.1W 1K | 1 | |
| R122 | CR10J183 | 0.1W 18K | 1 | |
| R124 | CR10F1500 | 0.1W 150 | 1 | |
| R125 | CR10J103 | 0.1W 10K | 1 | |
| R126 | CR10F1002 | 0.1W 10K | 1 | |
| R127 | CR10F3321 | 0.1W 3.32K | 1 | |
| R128 | CR10F1211 | 0.1W 1.21K | 1 | |
| R130 | CR10J822 | 0.1W 8.2K | 1 | |
| R131 | CR10J103 | 0.1W 10K | 1 | |
| R132 | CR10J472 | 0.1W 4.7K | 1 | |
| R136 | CR10J152 | 0.1W 1.5K | 1 | |
| R137 | CR10J472 | 0.1W 4.7K | 1 | |
| R139 | CR10J123 | 0.1W 12K | 1 | |
| R143 | CR10J822 | 0.1W 8.2K | 1 | |

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|---|---|---|---|---|
| R144 | CR10J222 | 0.1W 2.2K | 1 | |
| R145 | CR10F6980 | 0.1W 698 | 1 | |
| R153 | CR10F1002 | 0.1W 10K | 1 | |
| R154 | CR10F3321 | 0.1W 3.32K | 1 | |
| R157 | CR10F2210 | 0.1W 221 | 1 | |
| R158 | CR10J223 | 0.1W 22K | 1 | |
| R159 | CR10J103 | 0.1W 10K | 1 | |
| R160 | CR10J332 | 0.1W 3.3K | 1 | |
| R163 | CR10J183 | 0.1W 18K | 1 | |
| R164 | CR10J222 | 0.1W 2.2K | 1 | |
| R165,66 | CR10J103 | 0.1W 10K | 2 | |
| R167 | CR10J152 | 0.1W 1.5K | 1 | |
| R168 | CR10J472 | 0.1W 4.7K | 1 | |
| R169 | CR10J102 | 0.1W 1K | 1 | |
| R170 | CR10J752 | 0.1W 7.5K | 1 | |
| R171 | CR10J472 | 0.1W 4.7K | 1 | |
| R172 | ERJ6GEYJ101V | 1/8W 100 | 1 | |
| R173 | CR10J224 | 0.1W 220K | 1 | |
| R174 | CR10J471 | 0.1W 470 | 1 | |
| R175 | CR10J472 | 0.1W 4.7K | 1 | |
| R176 | CR10F1002 | 0.1W 10K | 1 | |
| R177 | CR10F2432 | 0.1W 24.3K | 1 | |
| R178 | CR10J472 | 0.1W 4.7K | 1 | |
| R179 | CR10J223 | 0.1W 22K | 1 | |
| R195 | CR10J473 | 0.1W 47K | 1 | |
| R197 | ERDS2TJ272 | 0.25W 2.7K | 1 | |
| | | | | |
| T001 | ETB28BF1V6AD | TRANSFORMER | 1 | ⚠ |
| | | | | |
| VR101 | ER0S2TKF2000 | 0.25W 200 | 1 | |
| | | | | |
| Z001 | ERZVA7D471 | VARISTOR | 1 | ⚠ |
| | | | | |
| ZD002 | MA4068N | DIODE | 1 | |
| ZD004 | MA8051 | DIODE | 1 | |
| ZD101 | MA4039M | DIODE | 1 | MAZ40390M |
| ZD102 | MAZ8051 | DIODE | 1 | |
| ZD103 | MA8051 | DIODE | 1 | |

| | | | | |
|---|---|---|---|---|
| ZD104 | MA8082 | DIODE | 1 | |
| ZD105 | MAZ8051 | DIODE | 1 | |
| ZD106 | MA8051 | DIODE | 1 | |
| ZD107 | RD6.2ESB | DIODE | 1 | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

TOP PREVIOUS NEXT

# 22 Schematic Diagram for printing with A4 size

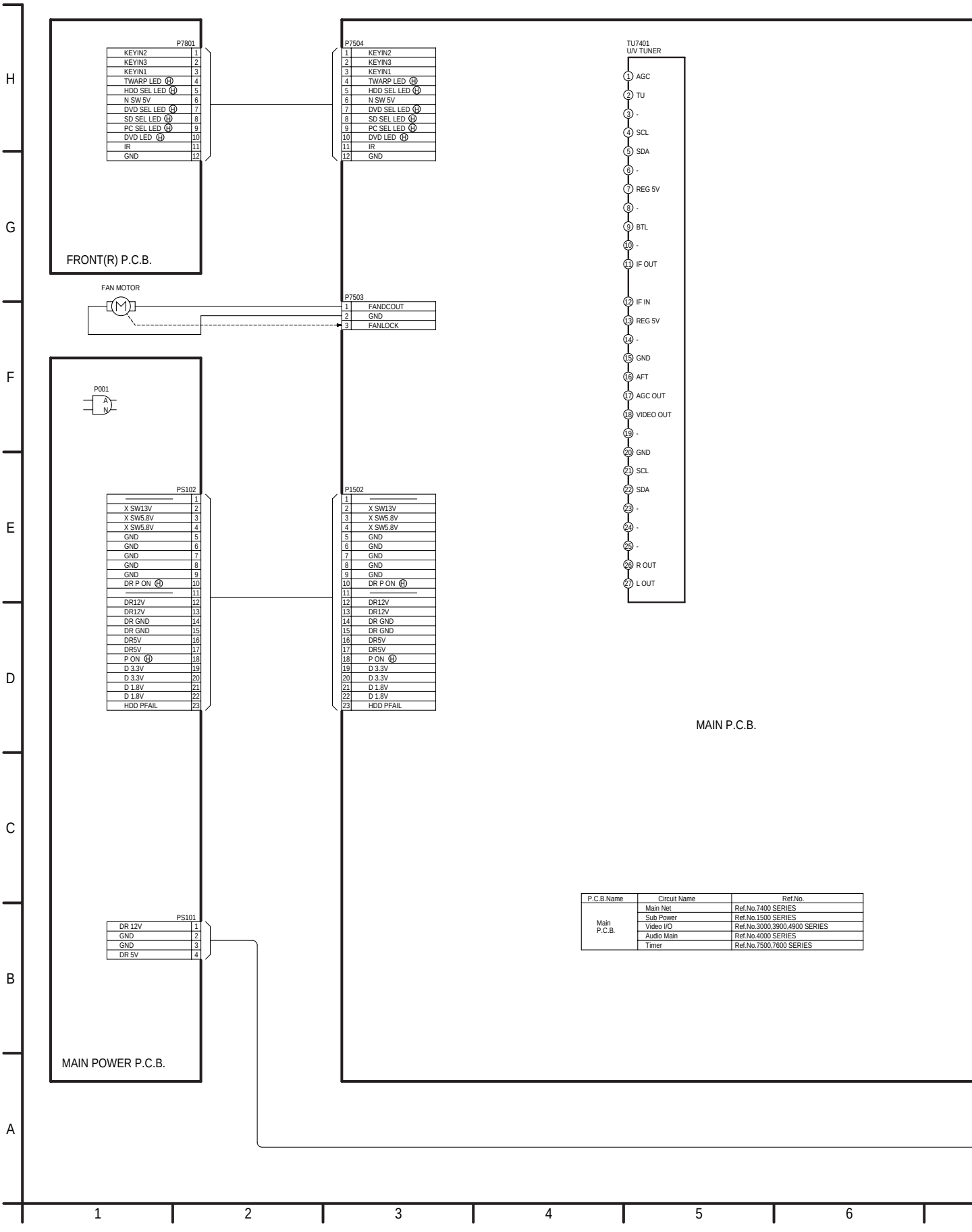
TOP PREVIOUS



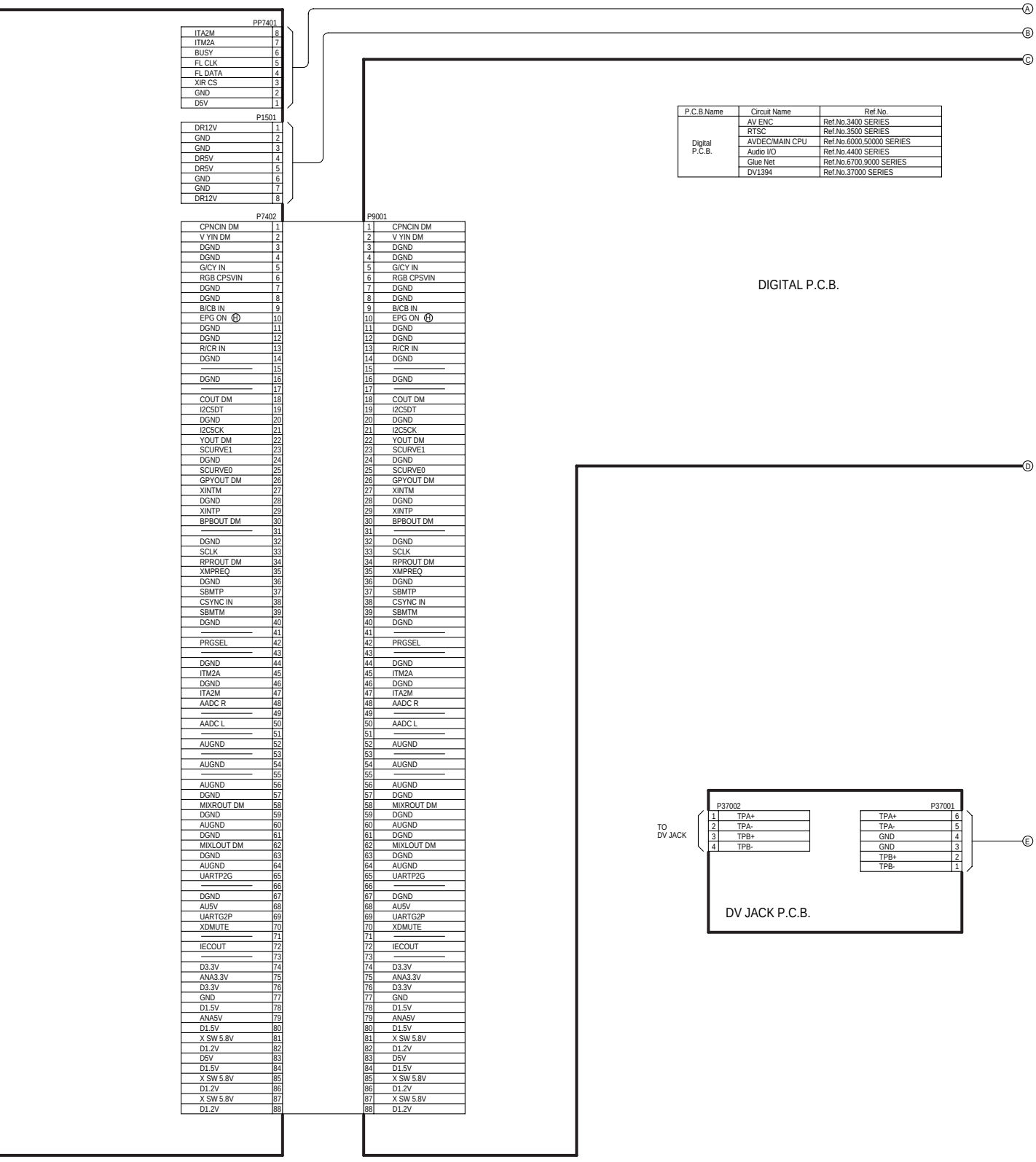
TOP PREVIOUS

# 18 Schematic Diagram

## 18.1. Interconnection Schematic Diagram




| P.C.B.Name | Circuit Name | Ref.No. |
|---|---|---|
| Main P.C.B. | Main Net | Ref.No.7400 SERIES |
| | Sub Power | Ref.No.1500 SERIES |
| | Video I/O | Ref.No.3000,3900,4900 SERIES |
| | Audio Main | Ref.No.4000 SERIES |
| | Timer | Ref.No.7500,7600 SERIES |



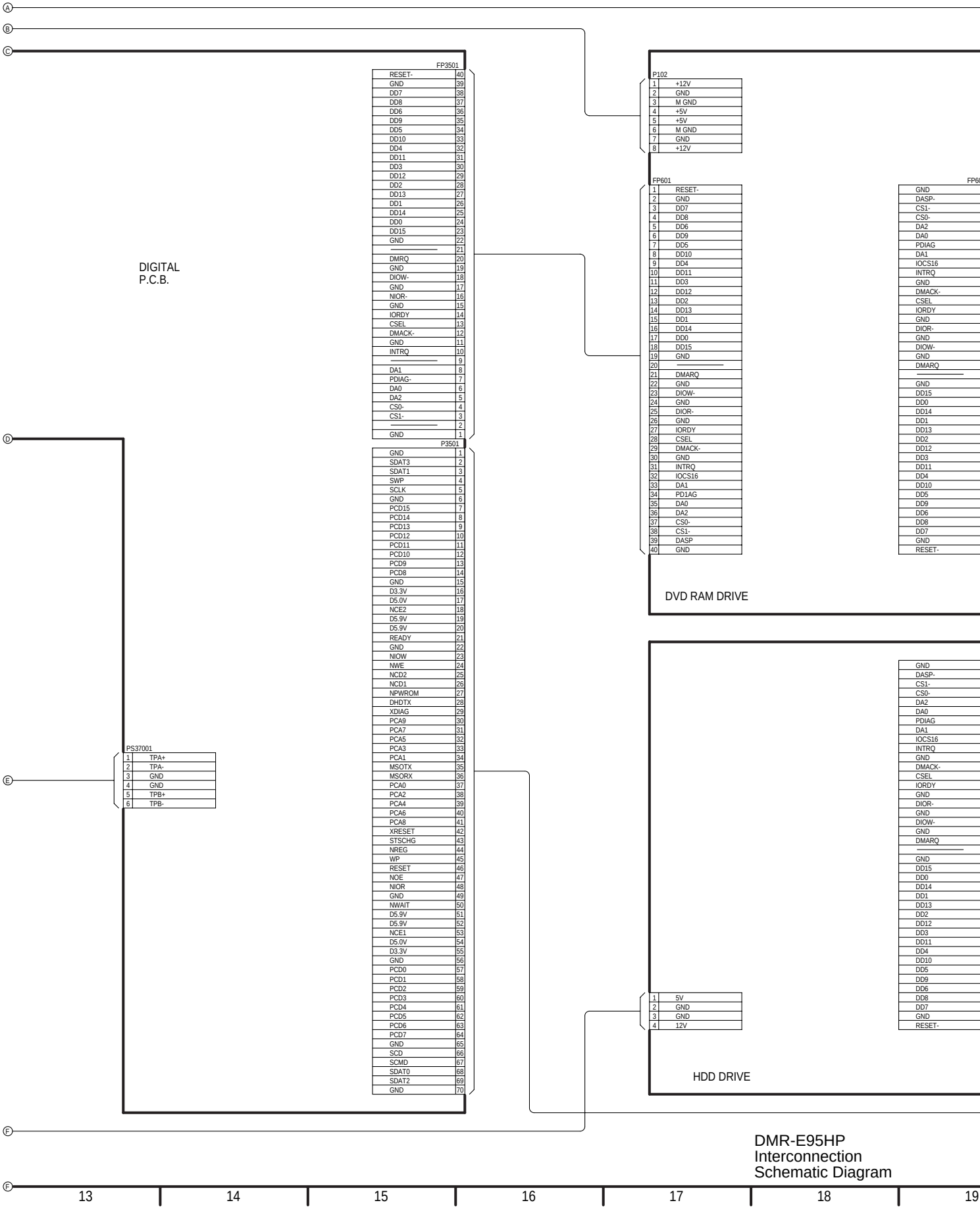

| P.C.B.Name | Circuit Name | Ref.No. |
|---|---|---|
| Digital P.C.B. | AV ENC | Ref.No.3400 SERIES |
| | RTSC | Ref.No.3500 SERIES |
| | AVDEC/MAIN CPU | Ref.No.6000,50000 SERIES |
| | Audio I/O | Ref.No.4400 SERIES |
| | Glue Net | Ref.No.6700,9000 SERIES |
| | DV1394 | Ref.No.37000 SERIES |

DIGITAL P.C.B.

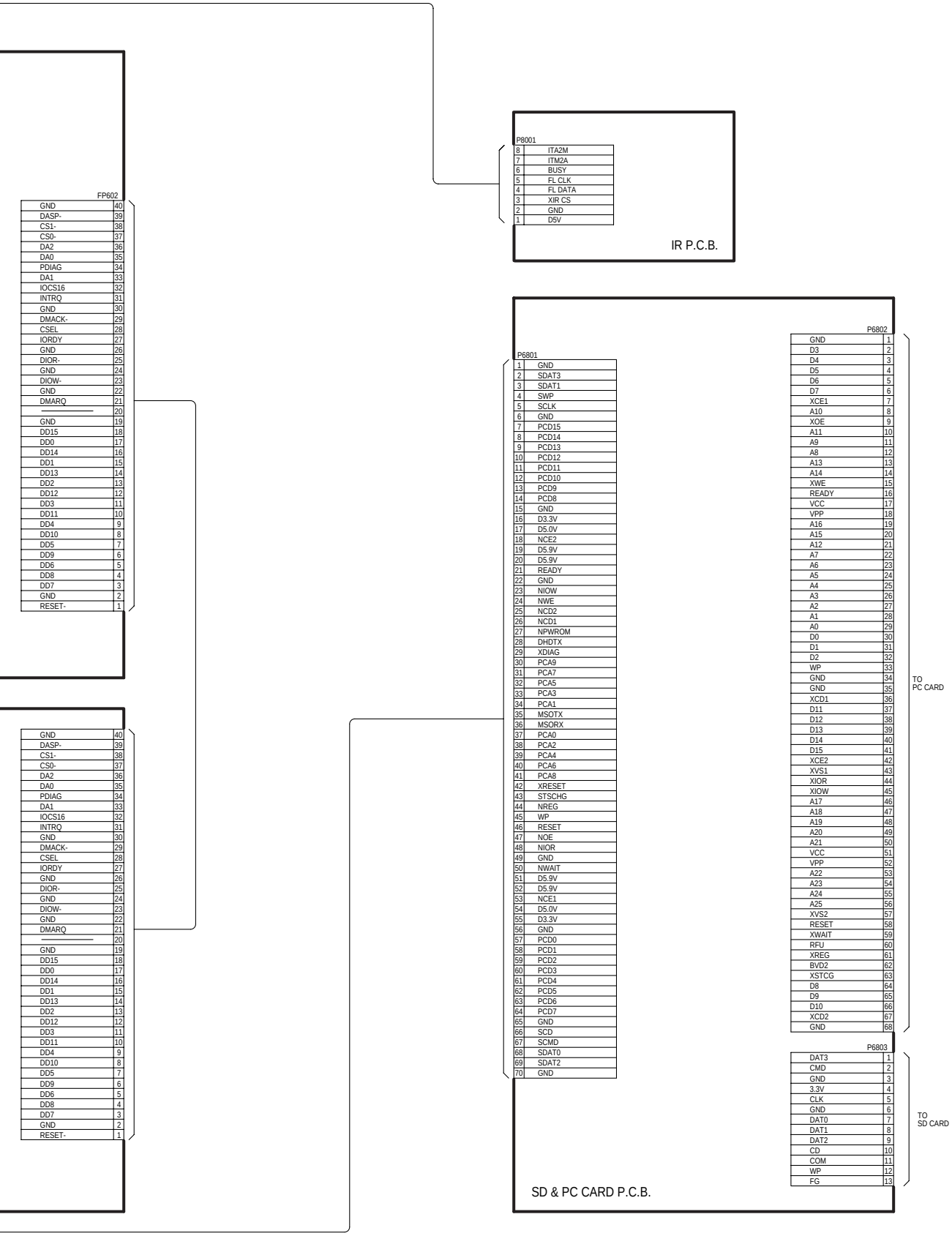



DMR-E95HP
Interconnection
Schematic Diagram

7 8 9 10 11 12




DMR-E95HP
Interconnection
Schematic Diagram



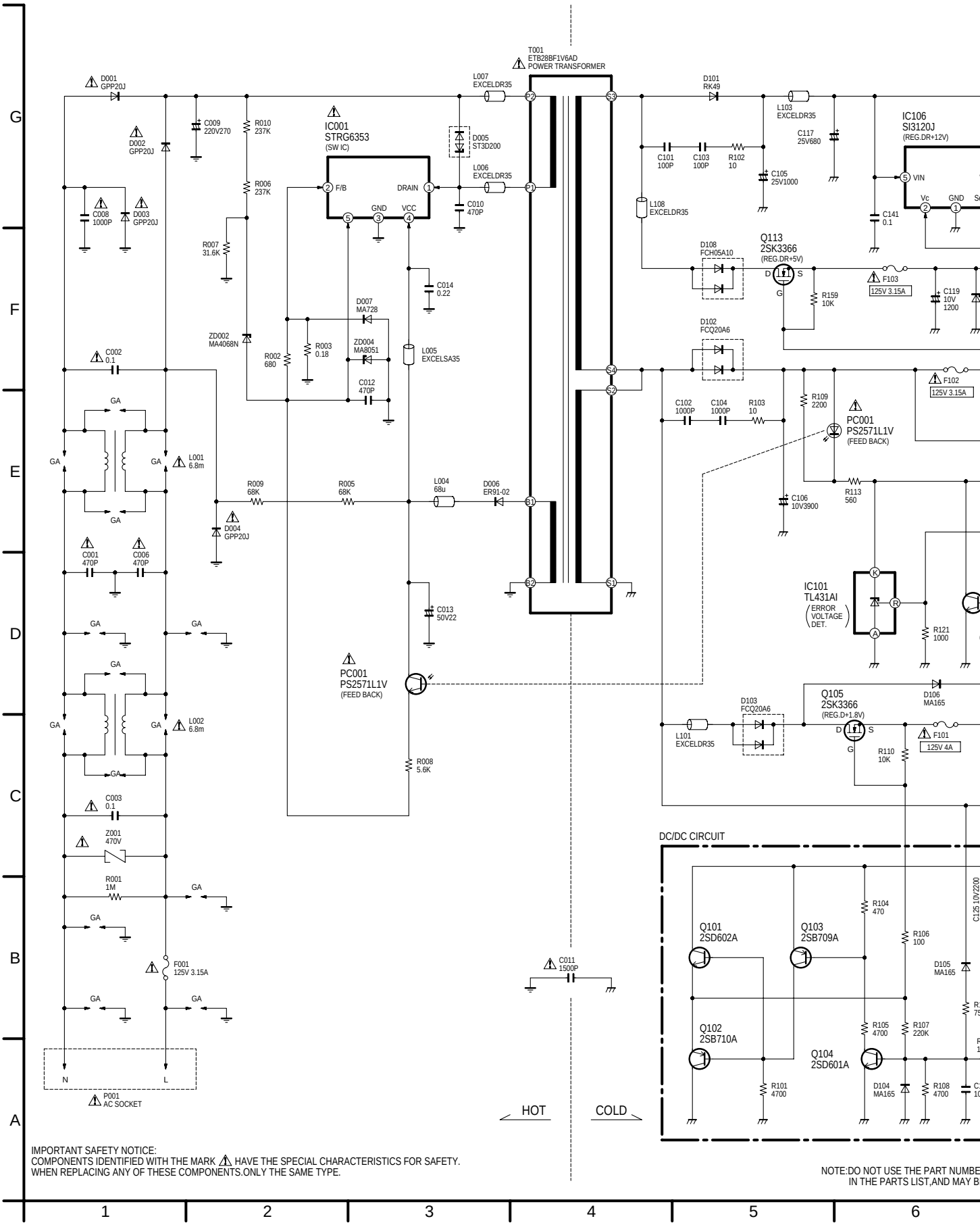

DMR-E95HP
Interconnection
Schematic Diagram

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

m

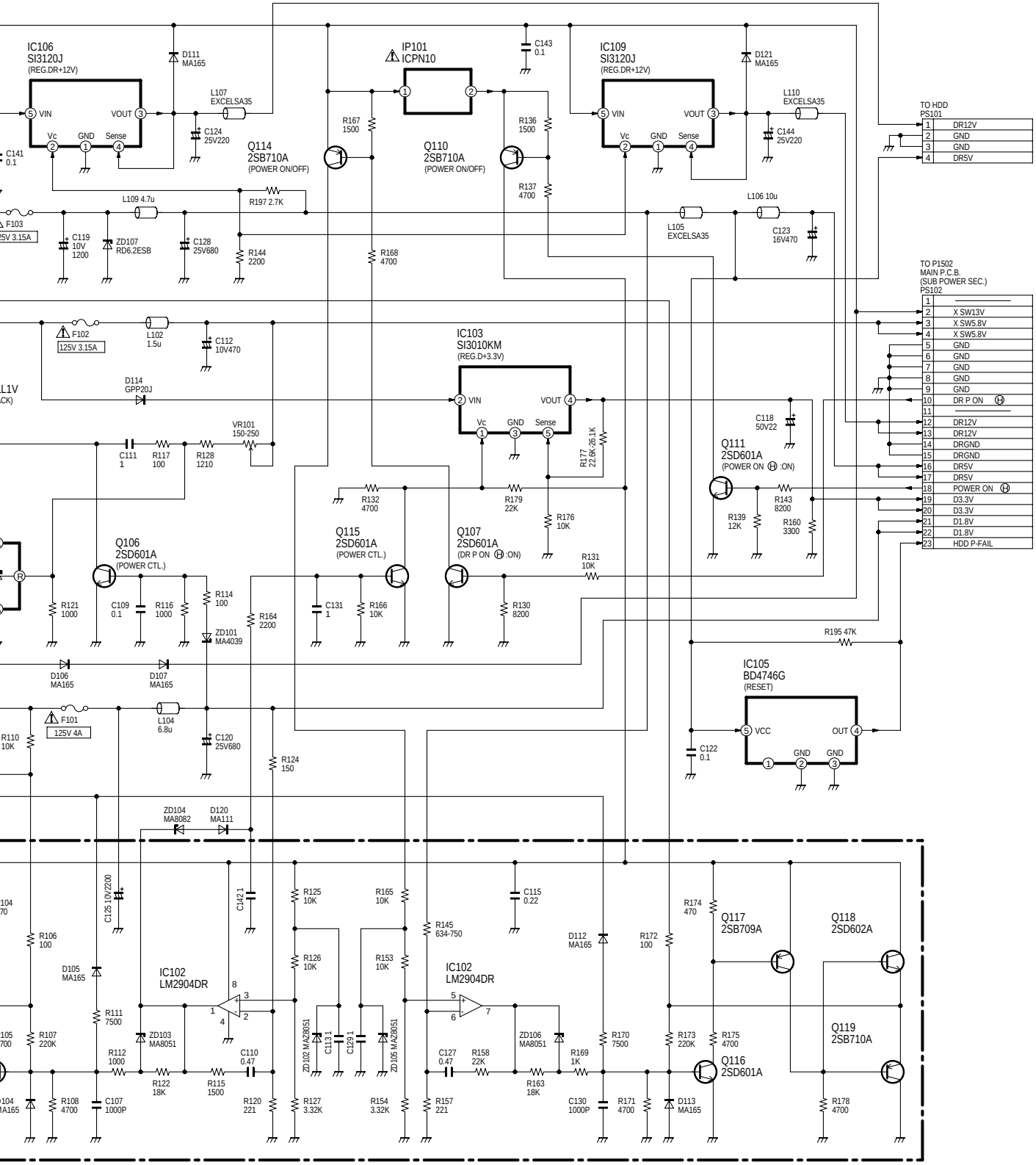
19 20 21 22 23 24

# 18.2. Main Power Schematic Diagram




IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS.ONLY THE SAME TYPE.

NOTE:DO NOT USE THE PART NUMBE
IN THE PARTS LIST,AND MAY B

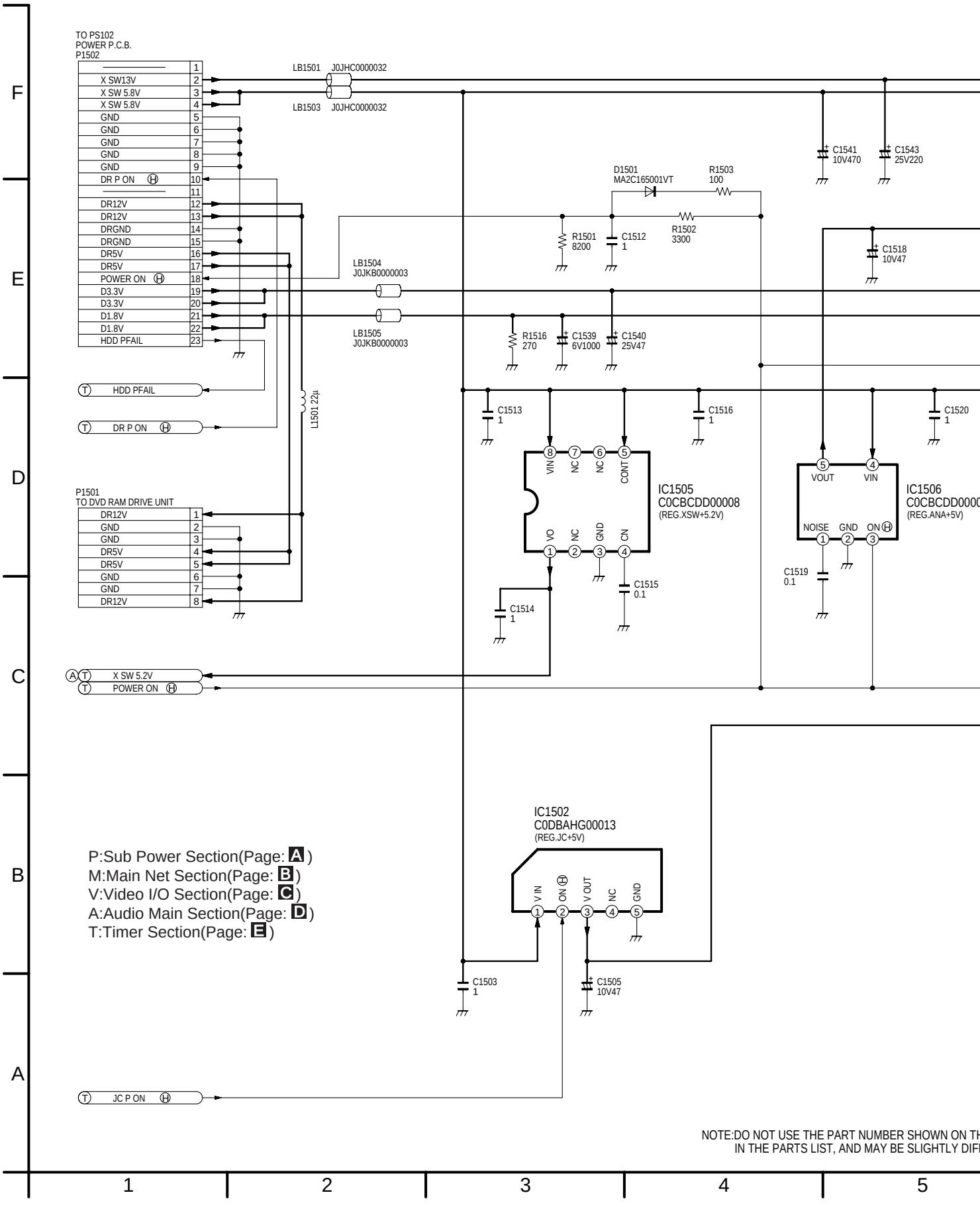


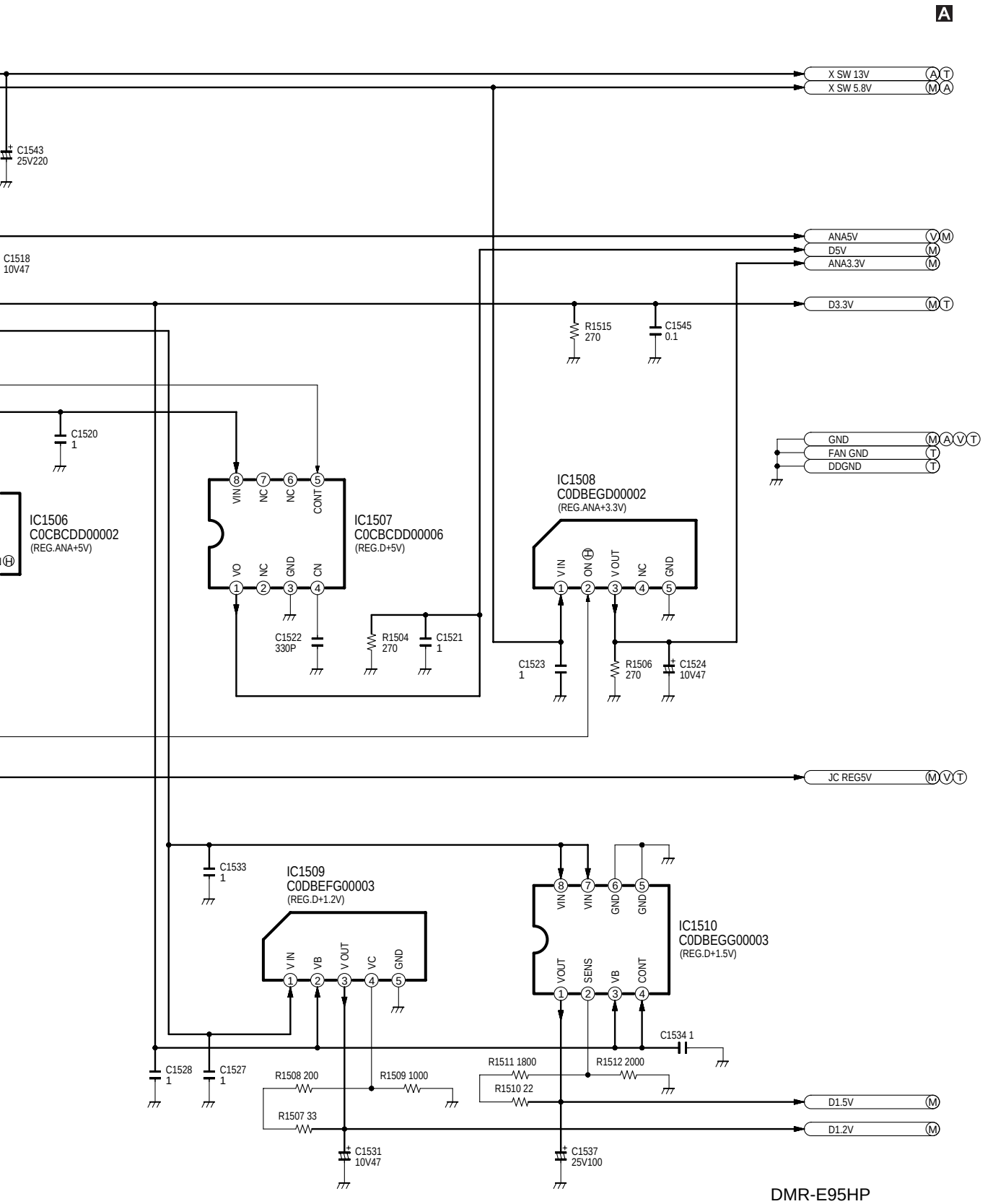

T USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING.THE CORRECT PART NUMBER IS SHOWN
PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E95HP
Main Power
Schematic Diagram

| 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|

# 18.3. Sub Power Section (Main P.C.B. (1/5)) Schematic Diagram (P)



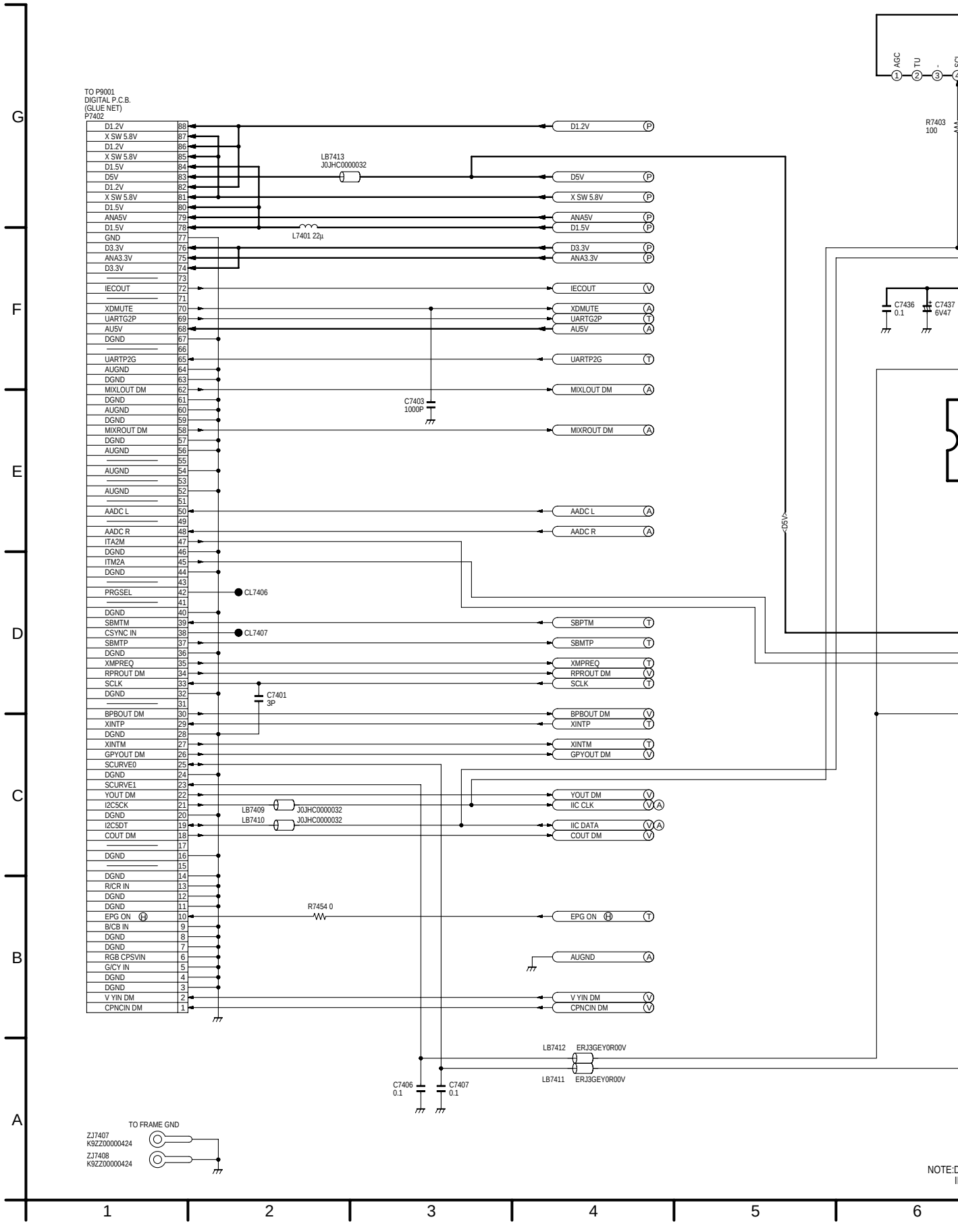


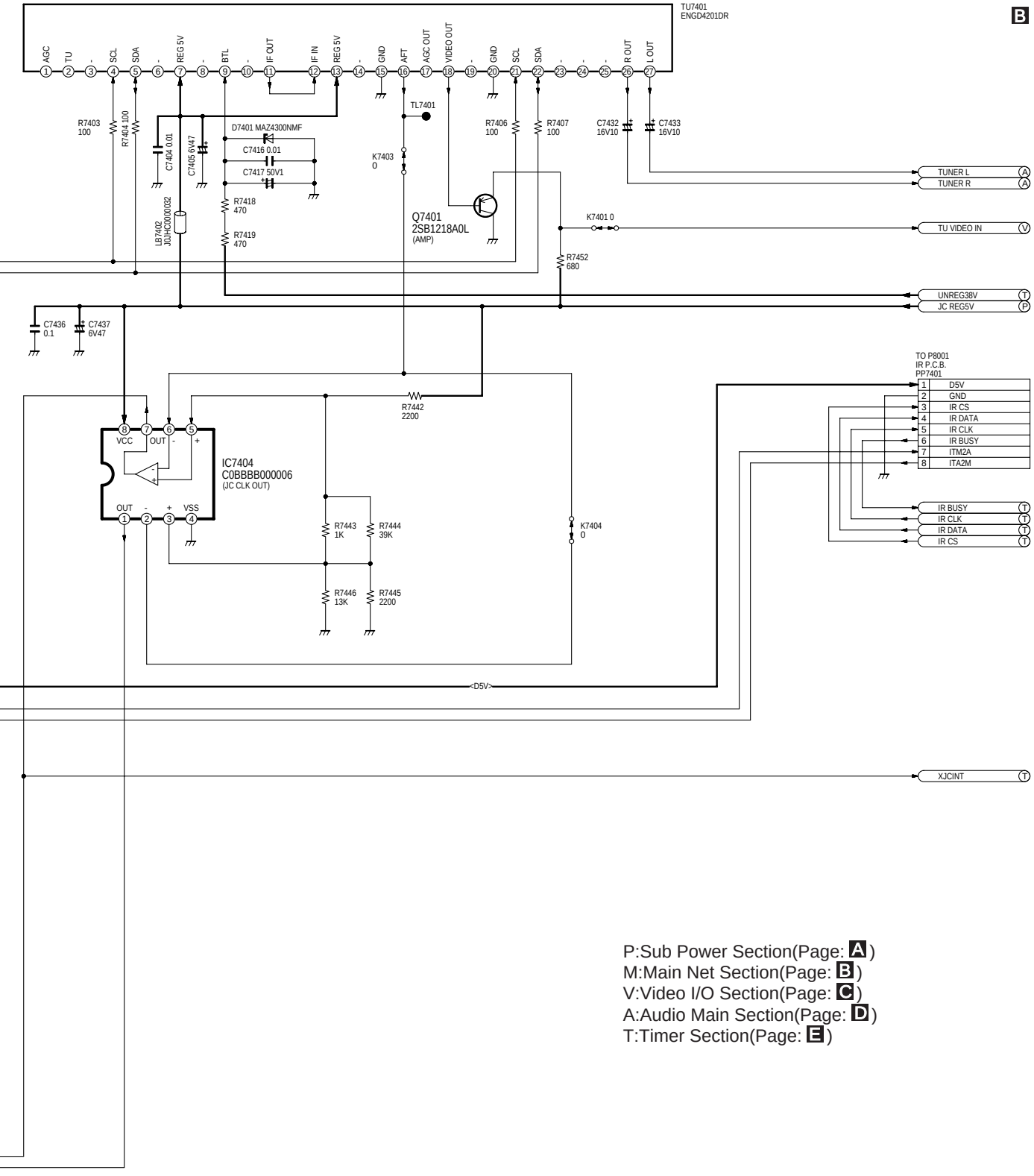

MBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN
Y BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E95HP
Sub Power Section
(Main P.C.B.(1/5))
Schematic Diagram(P)

5 | 6 | 7 | 8 | 9

# 18.4. Main Net Section (Main P.C.B. (2/5)) Schematic Diagram (M)





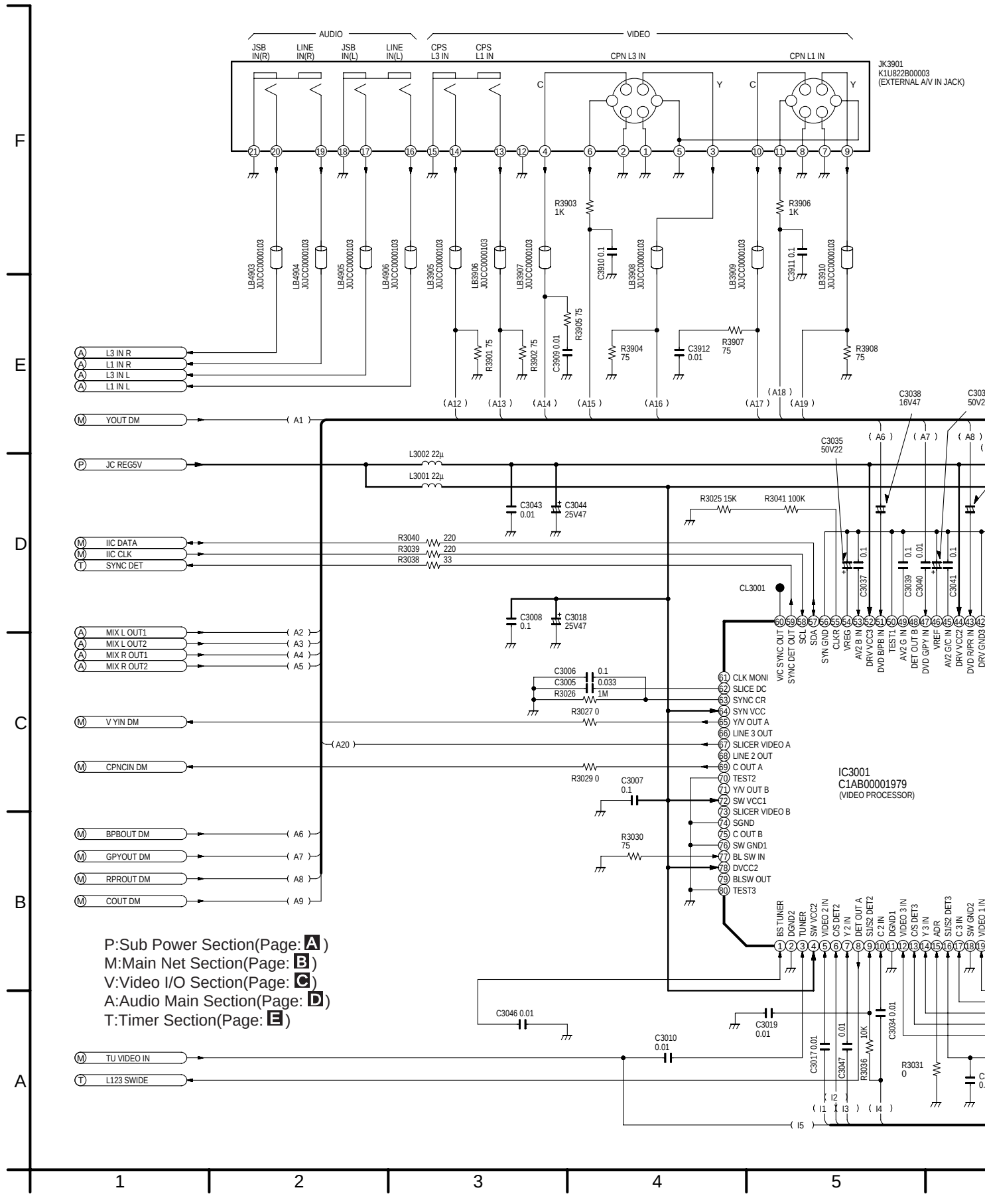

P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)

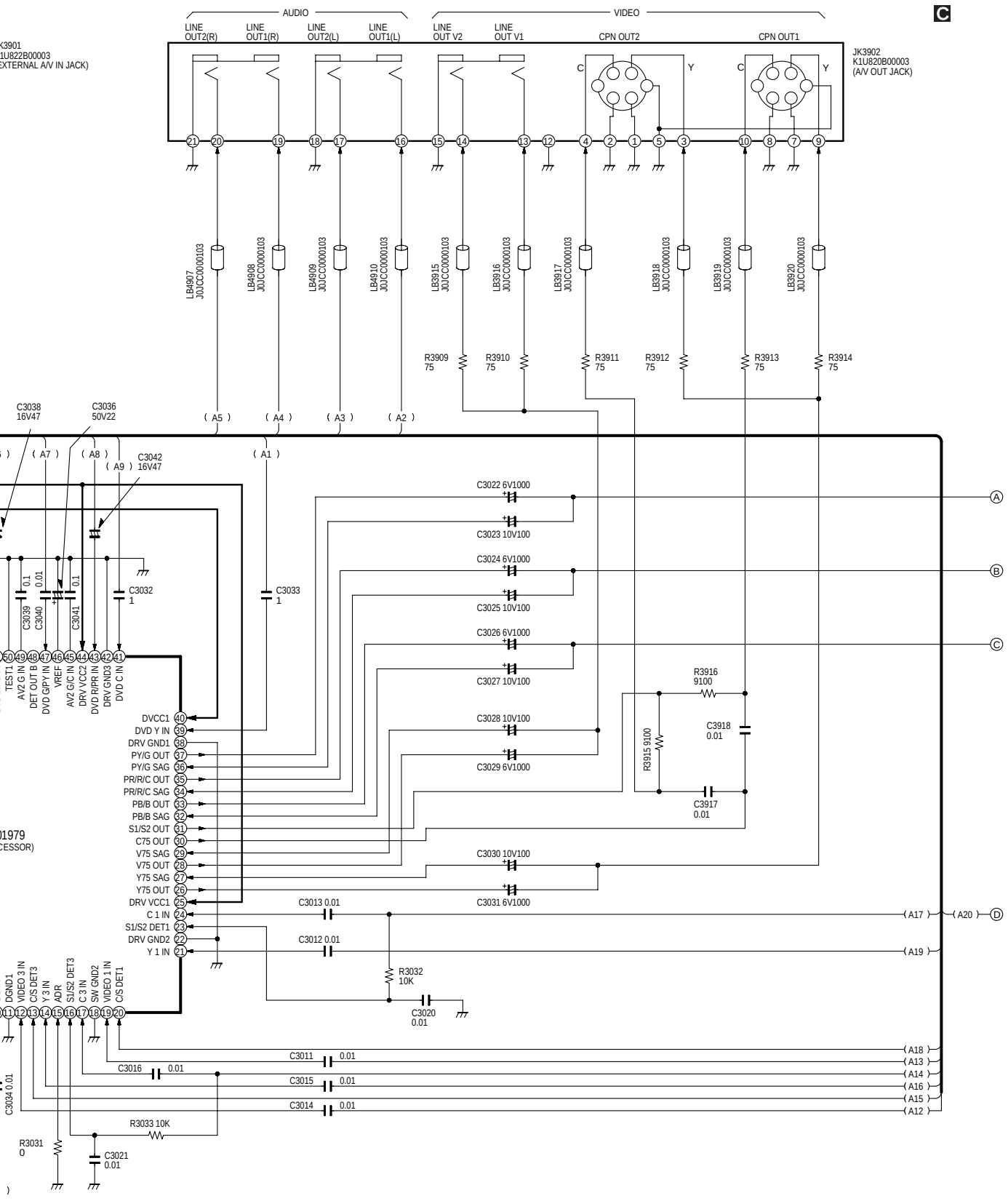
DMR-E95HP
Main Net Section
(Main P.C.B.(2/5))
Schematic Diagram(M)

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

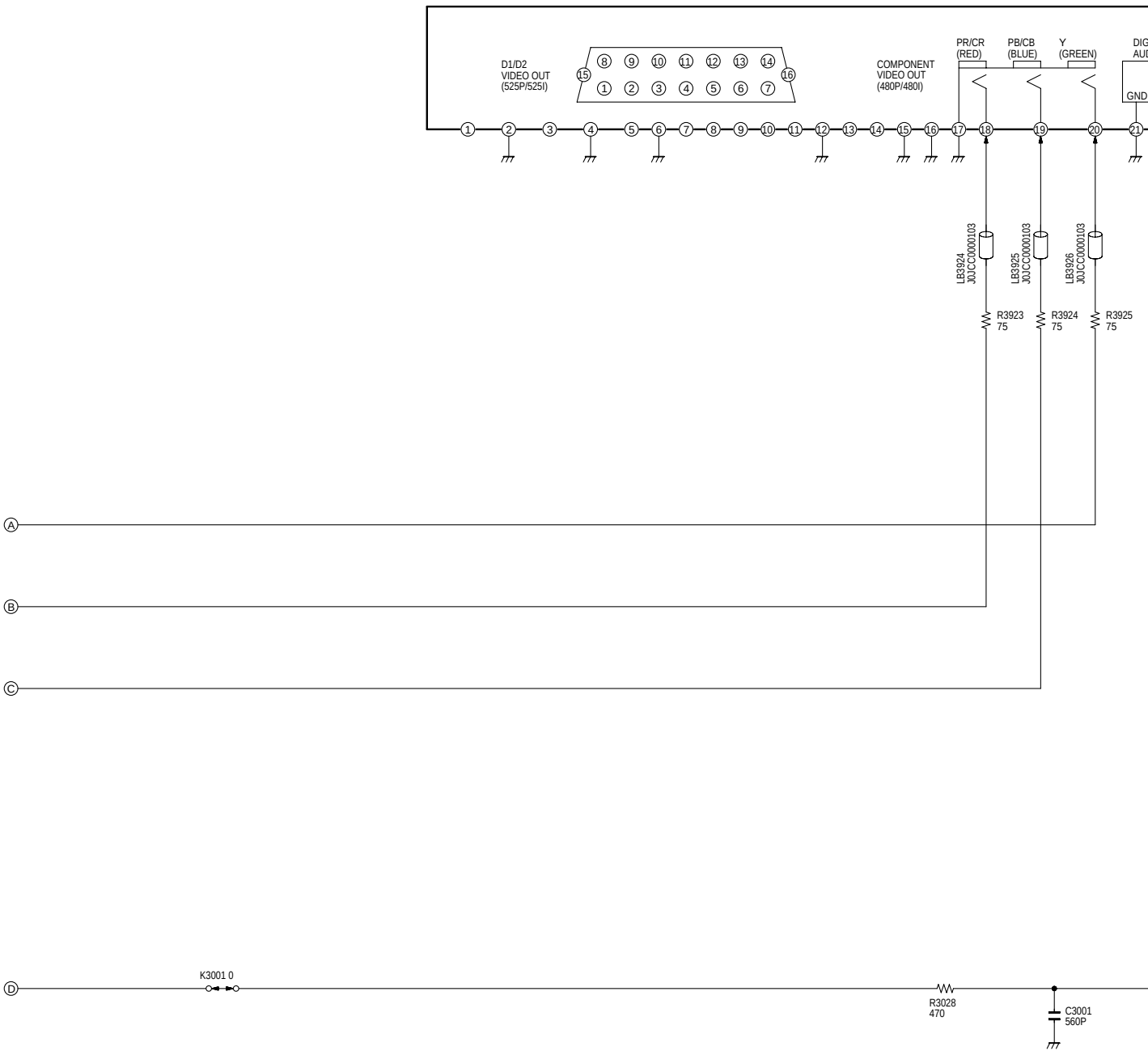
6 | 7 | 8 | 9 | 10 | 11

# 18.5. Video I/O Section (Main P.C.B. (3/5)) Schematic Diagram (V)






DMR-E95HP
Video I/O Section(Main P.C.B.(3/5))Schematic Diagram(V)



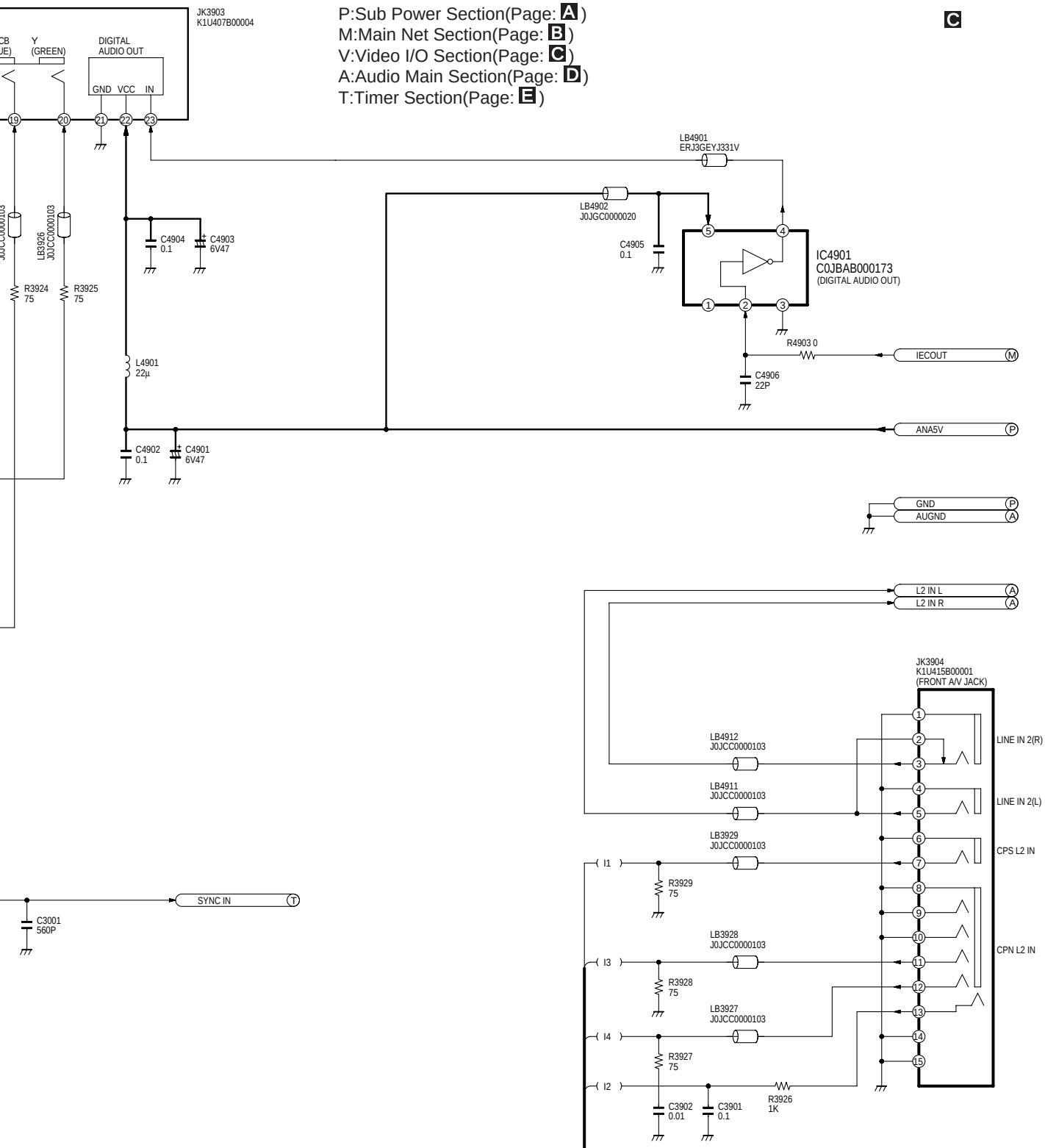

DMR-E95HP
Video I/O Section(Main P.C.B.(3/5))Schematic Diagram(V)

NOTE:DO NOT USE THE PART NUMBER SHOWN O
IN THE PARTS LIST, AND MAY BE SLIGHTLY

11 12 13 14 15

P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)

C

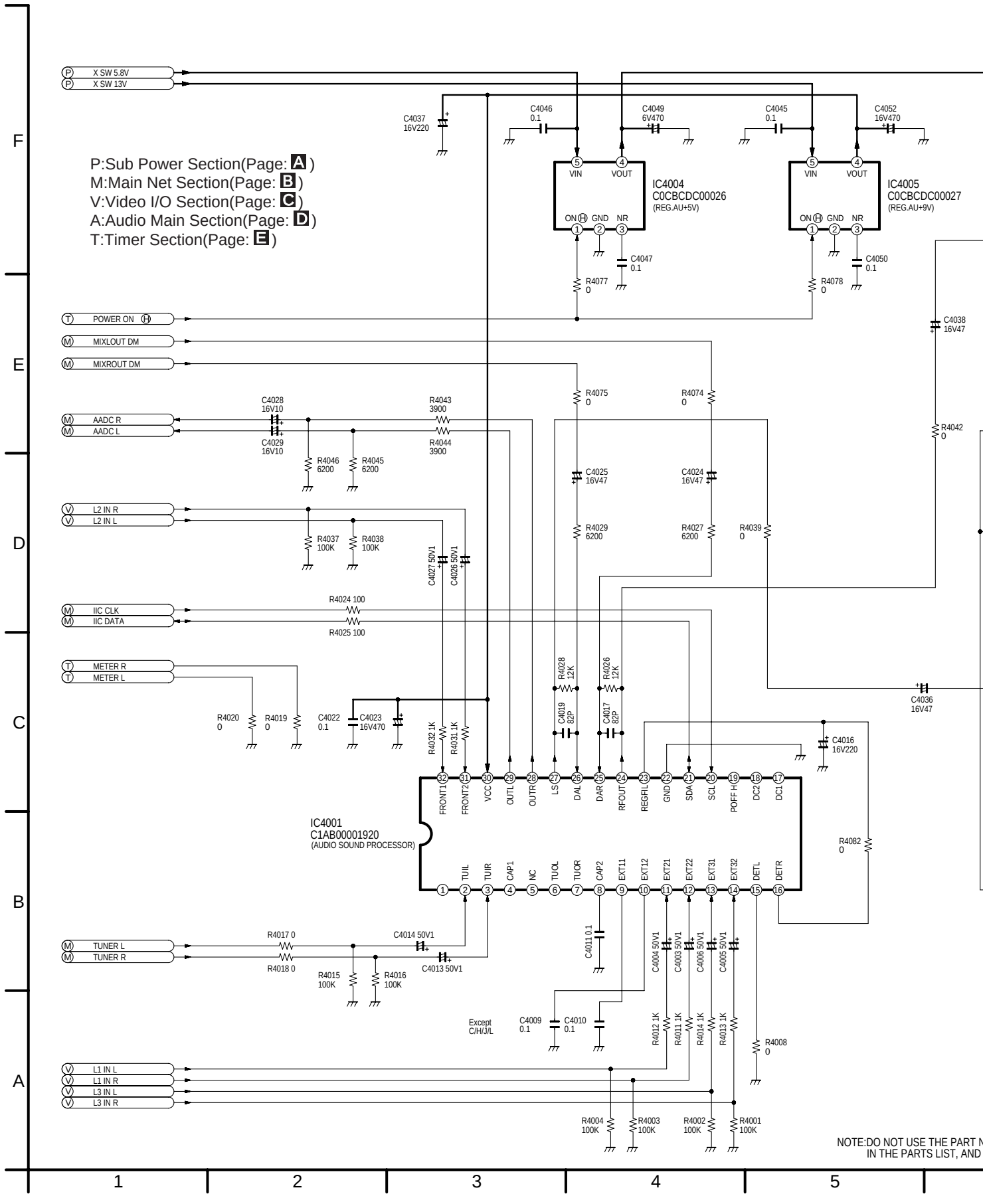



DMR-E95HP
Video I/O Section
(Main P.C.B.(3/5))
Schematic Diagram(V)

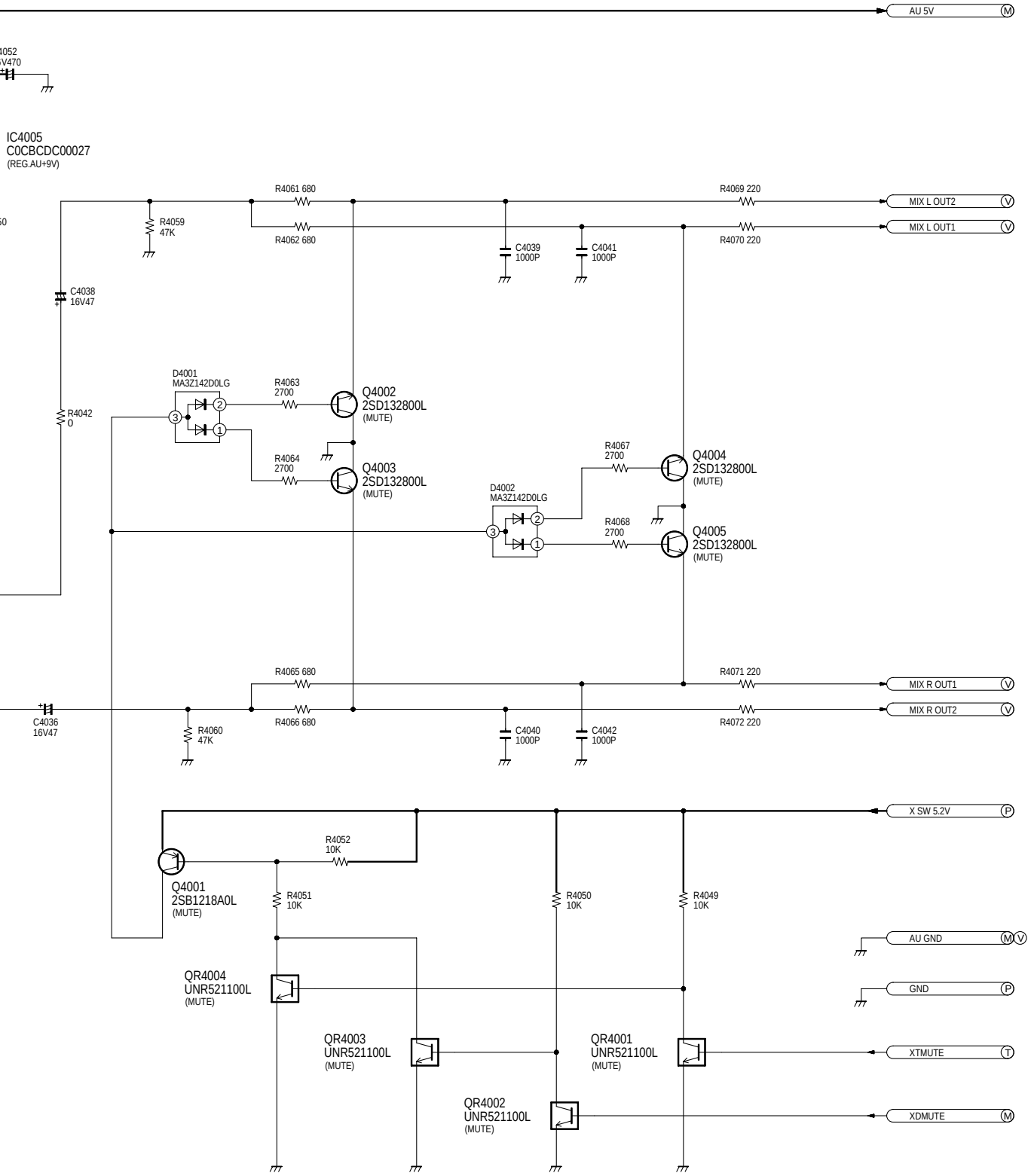
RT NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN
ND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

16 17 18 19 20

# 18.6. Audio Main Section (Main P.C.B. (4/5)) Schematic Diagram (A)



D

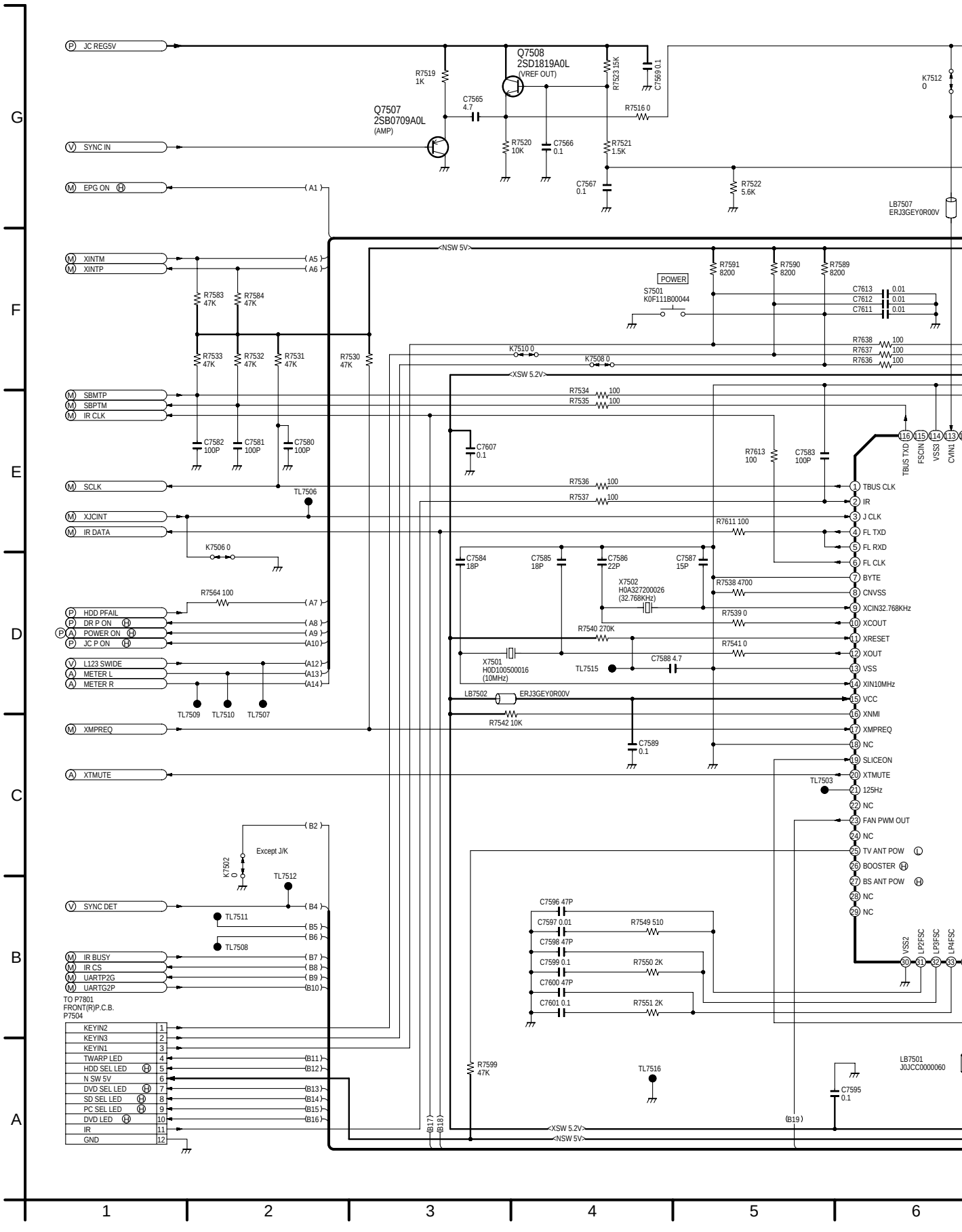


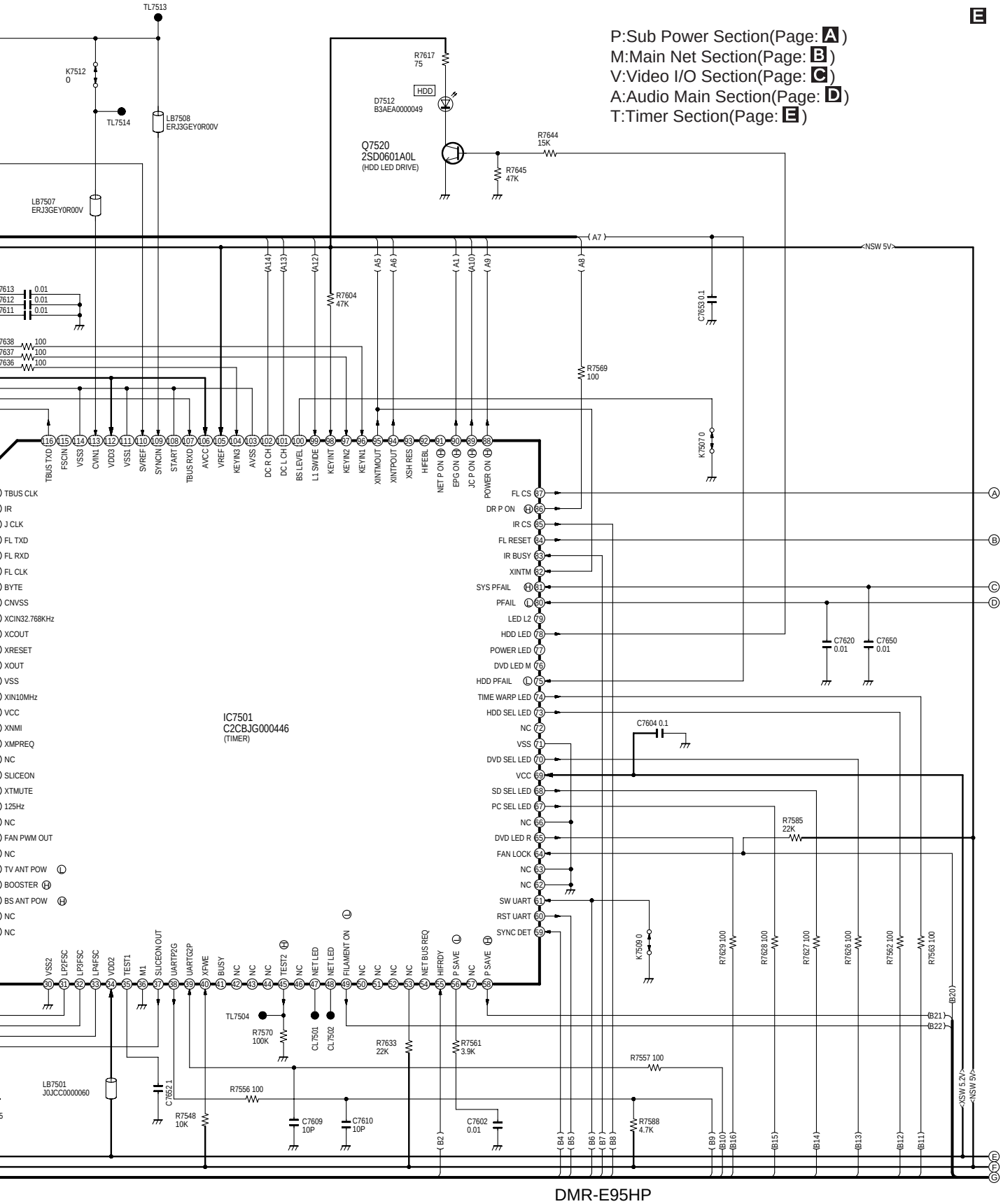

DMR-E95HP
Audio Main Section
(Main P.C.B.(4/5))
Schematic Diagram(A)

NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN
THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

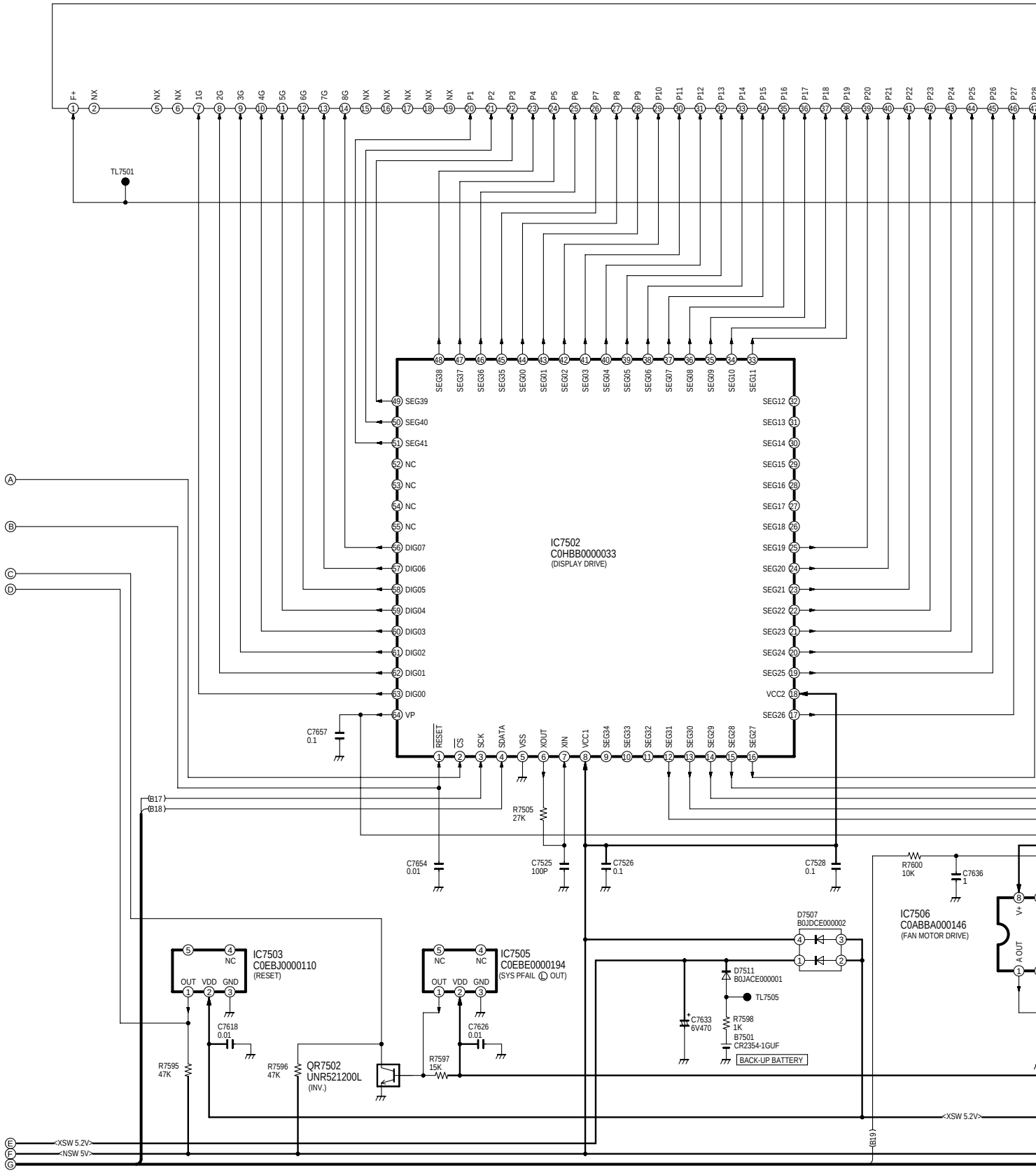
6 | 7 | 8 | 9 | 10

# 18.7. Timer Section (Main P.C.B. (5/5)) Schematic Diagram (T)

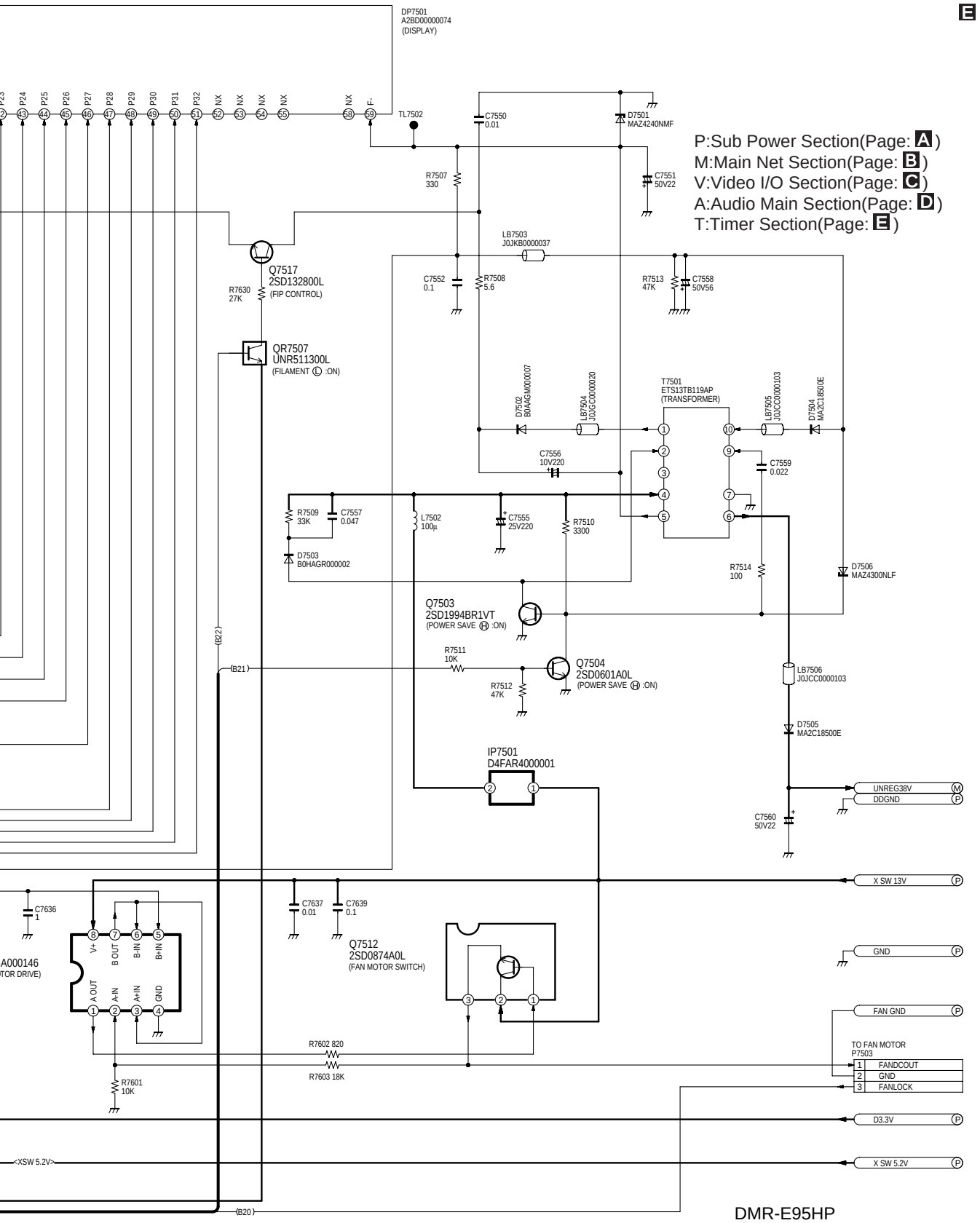





DMR-E95HP
Timer Section(Main P.C.B.(5/5)) Schematic Diagram(T)




DMR-E95HP
Timer Section(Main P.C.B.(5/5)) Schematic Diagram(T)

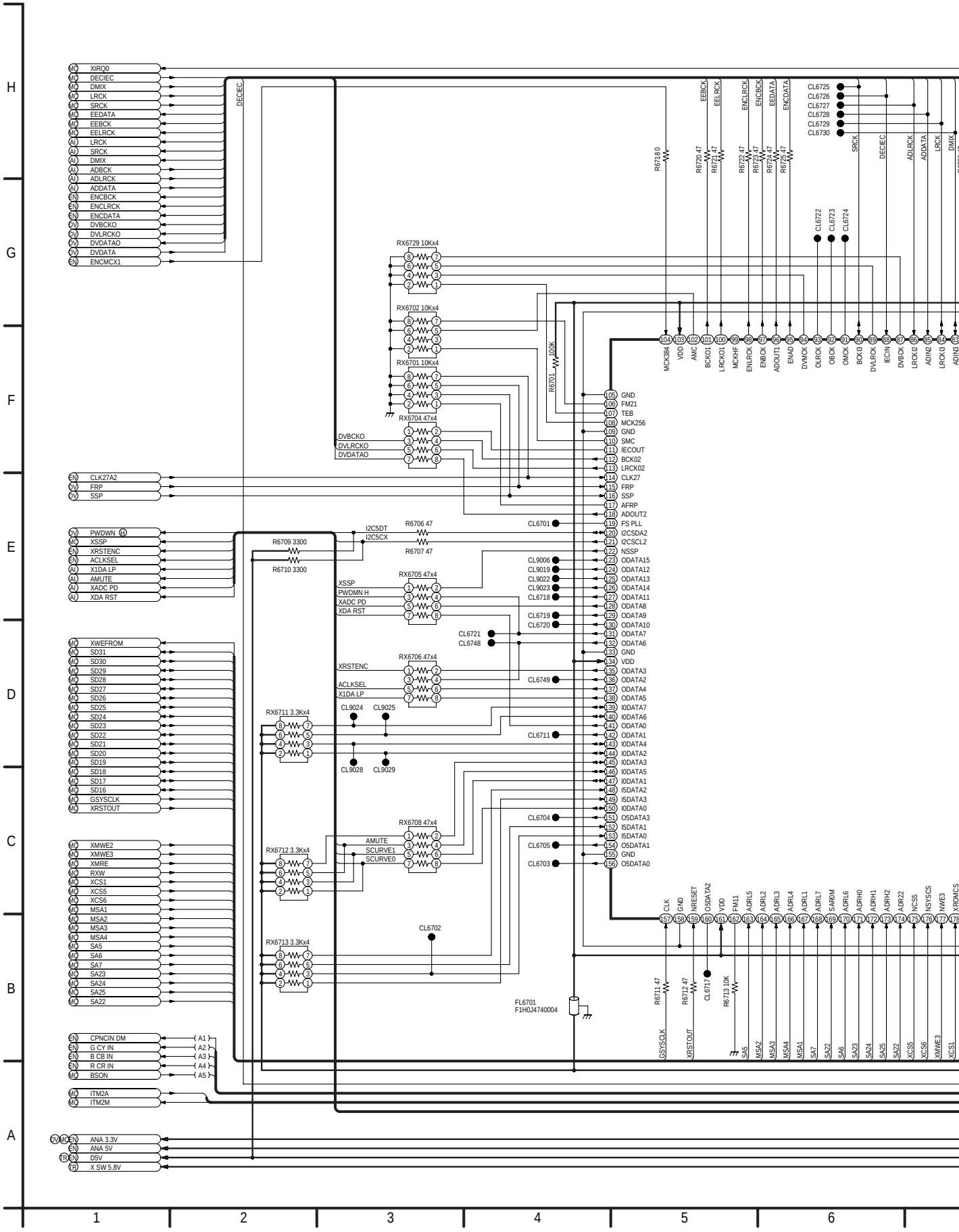


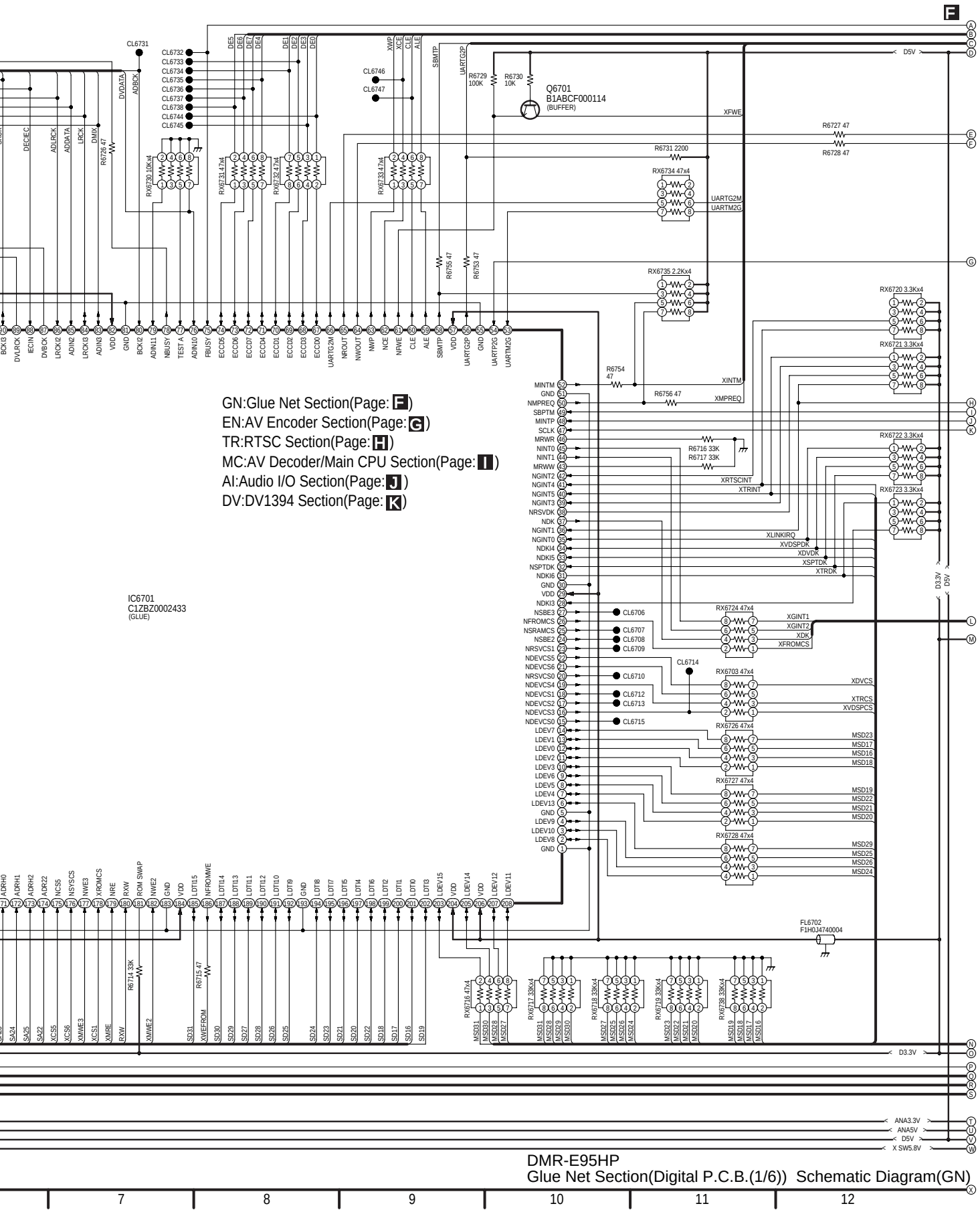

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

DMR-E95HP
Timer Section(Main P.C.B.(5/5))
Schematic Diagram(T)

17 | 18 | 19 | 20 | 21 | 22

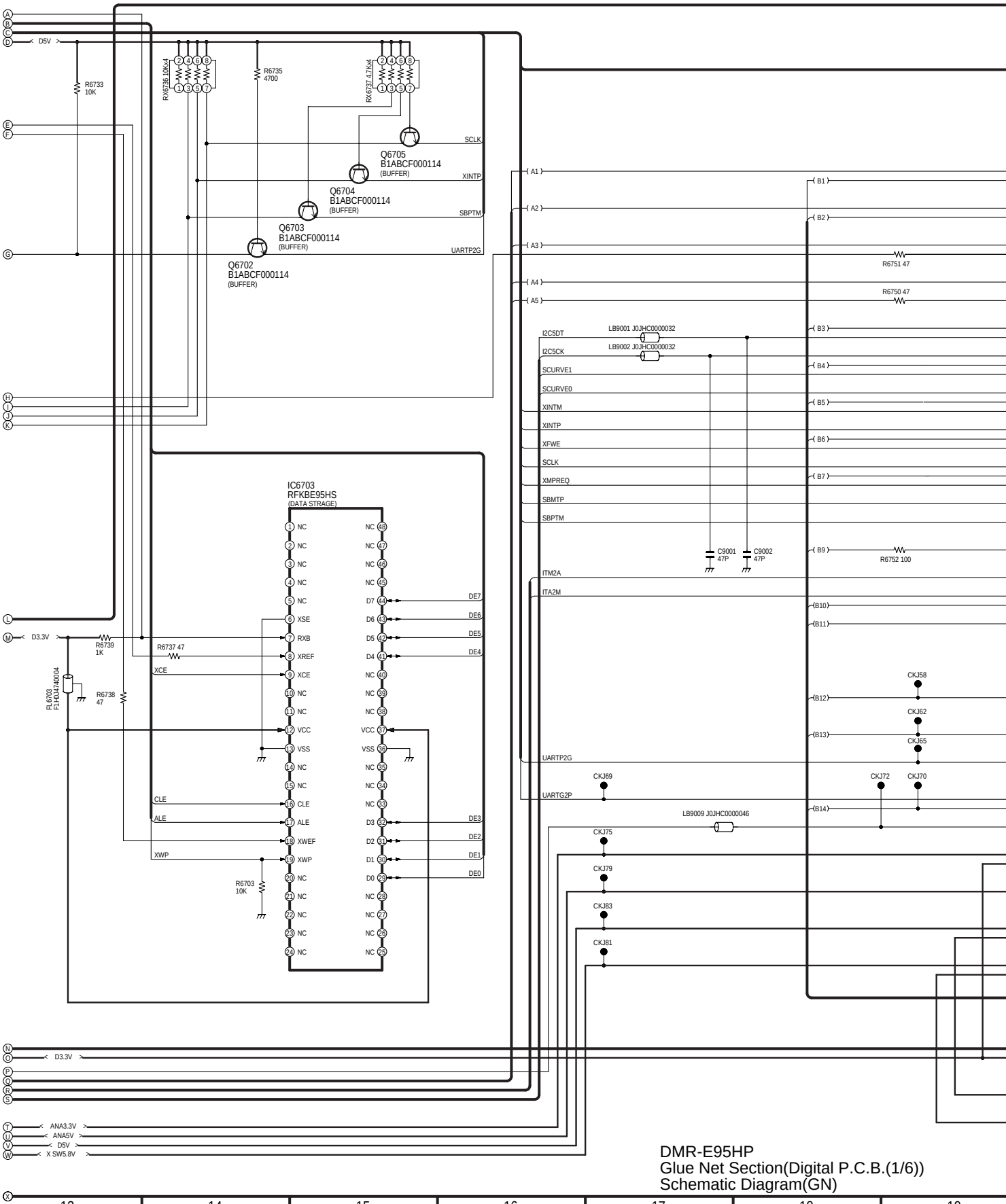
# 18.8. Glue Net Section (Digital P.C.B. (1/6)) Schematic Diagram (GN)



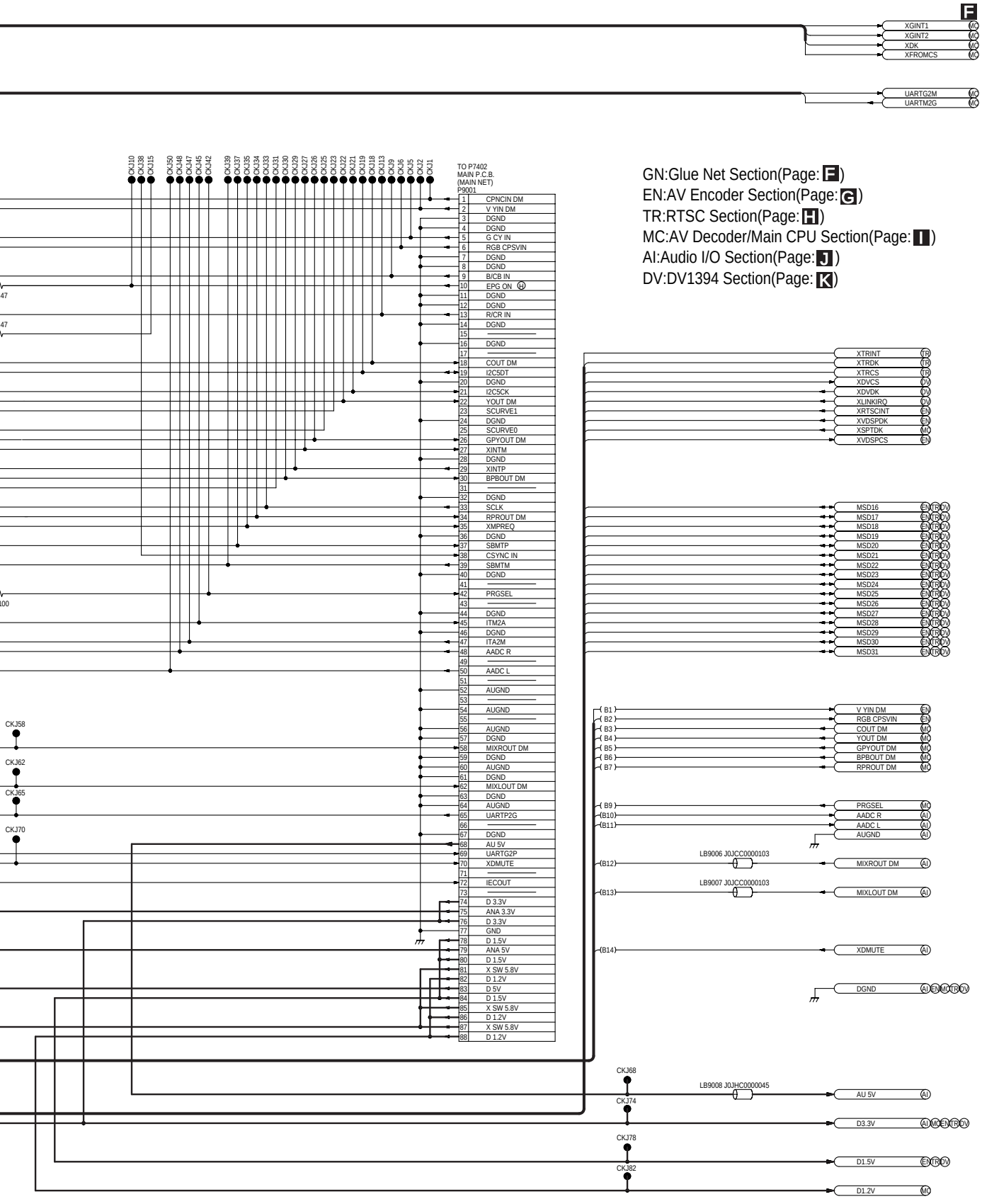



DMR-E95HP

Glue Net Section(Digital P.C.B.(1/6)) Schematic Diagram(GN)




DMR-E95HP
Glue Net Section(Digital P.C.B.(1/6))
Schematic Diagram(GN)

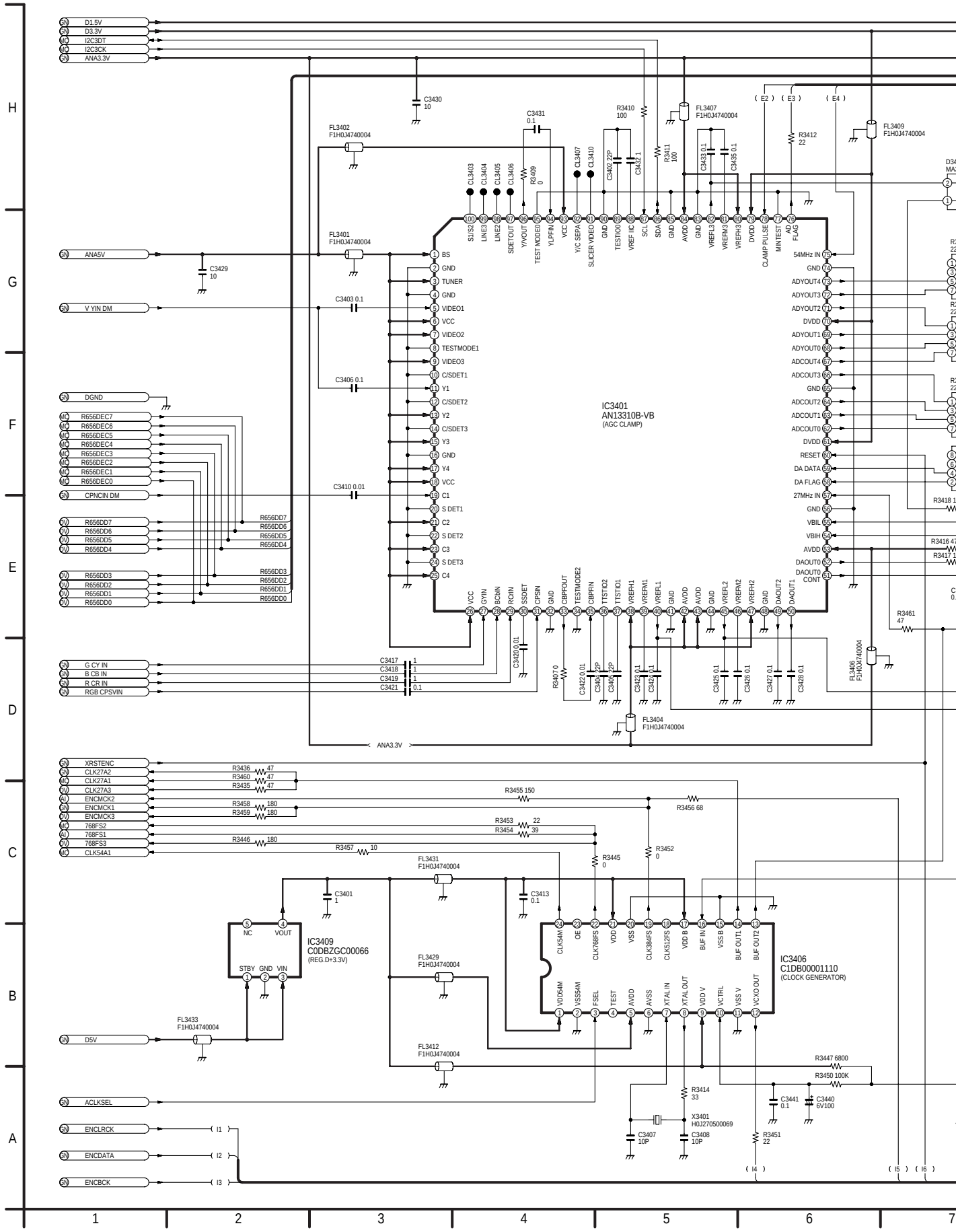


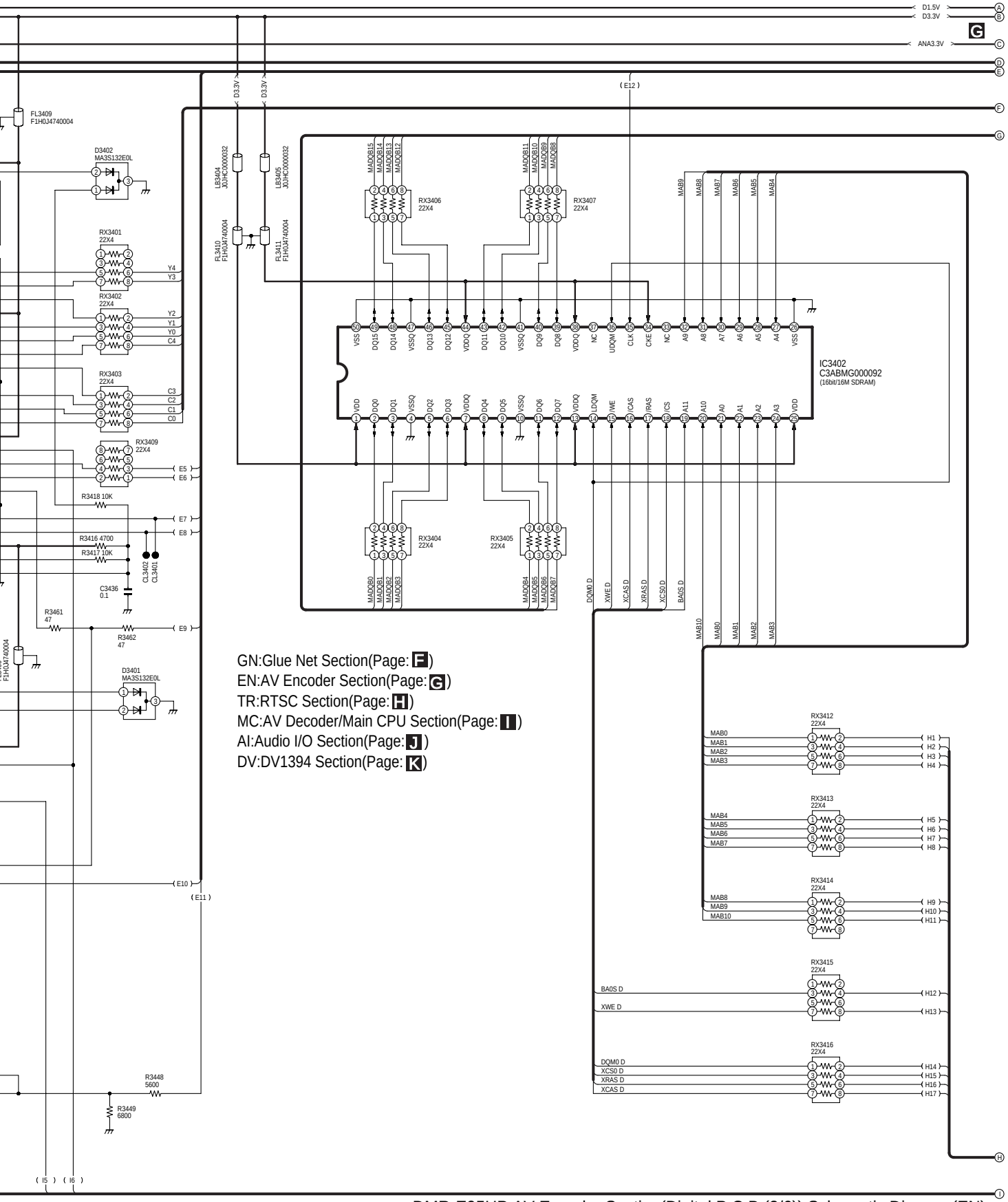

DMR-E95HP
Glue Net Section(Digital P.C.B.(1/6))
Schematic Diagram(GN)

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

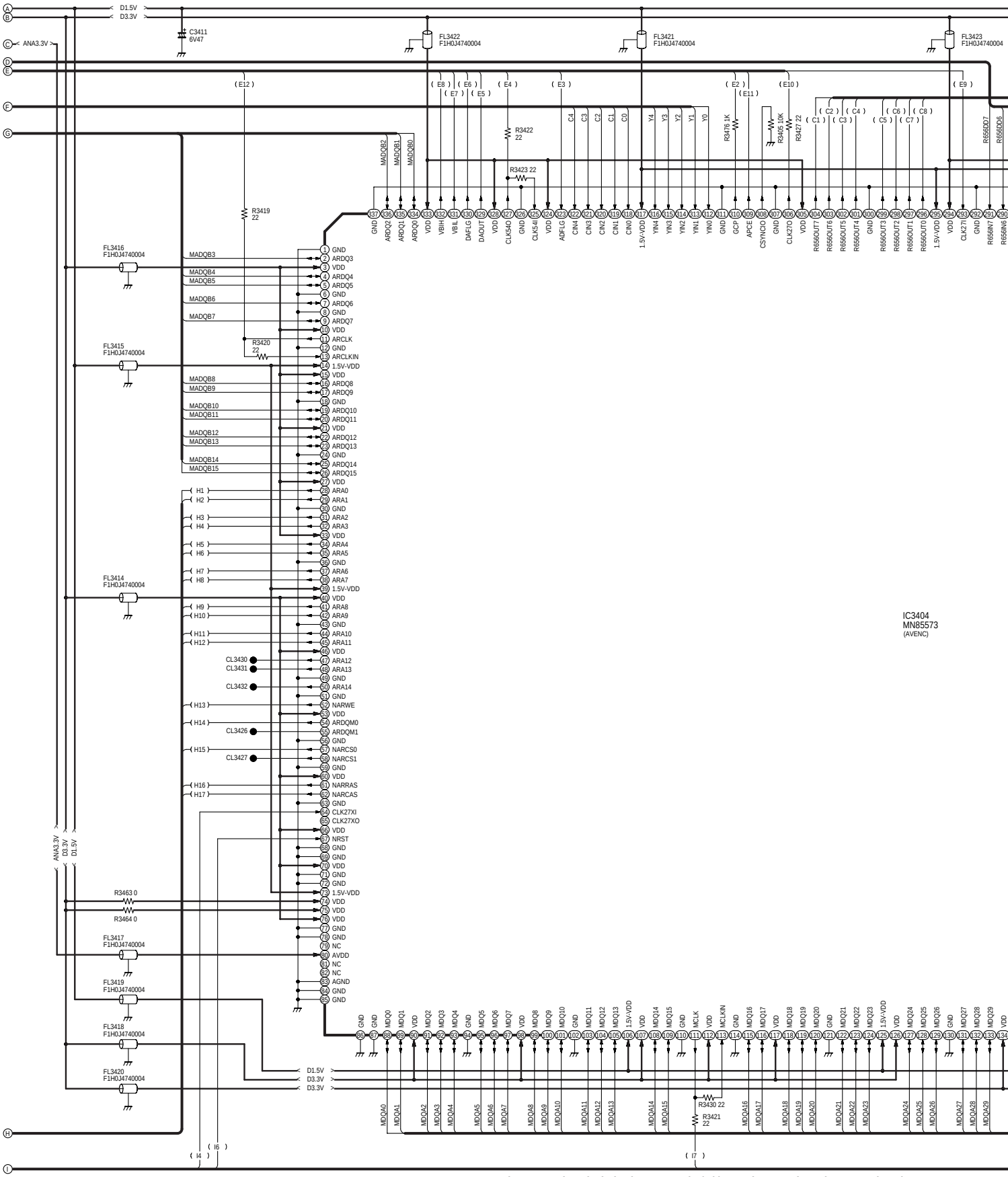
19 20 21 22 23 24 25

# 18.9. AV Encoder Section (Digital P.C.B. (2/6)) Schematic Diagram (EN)



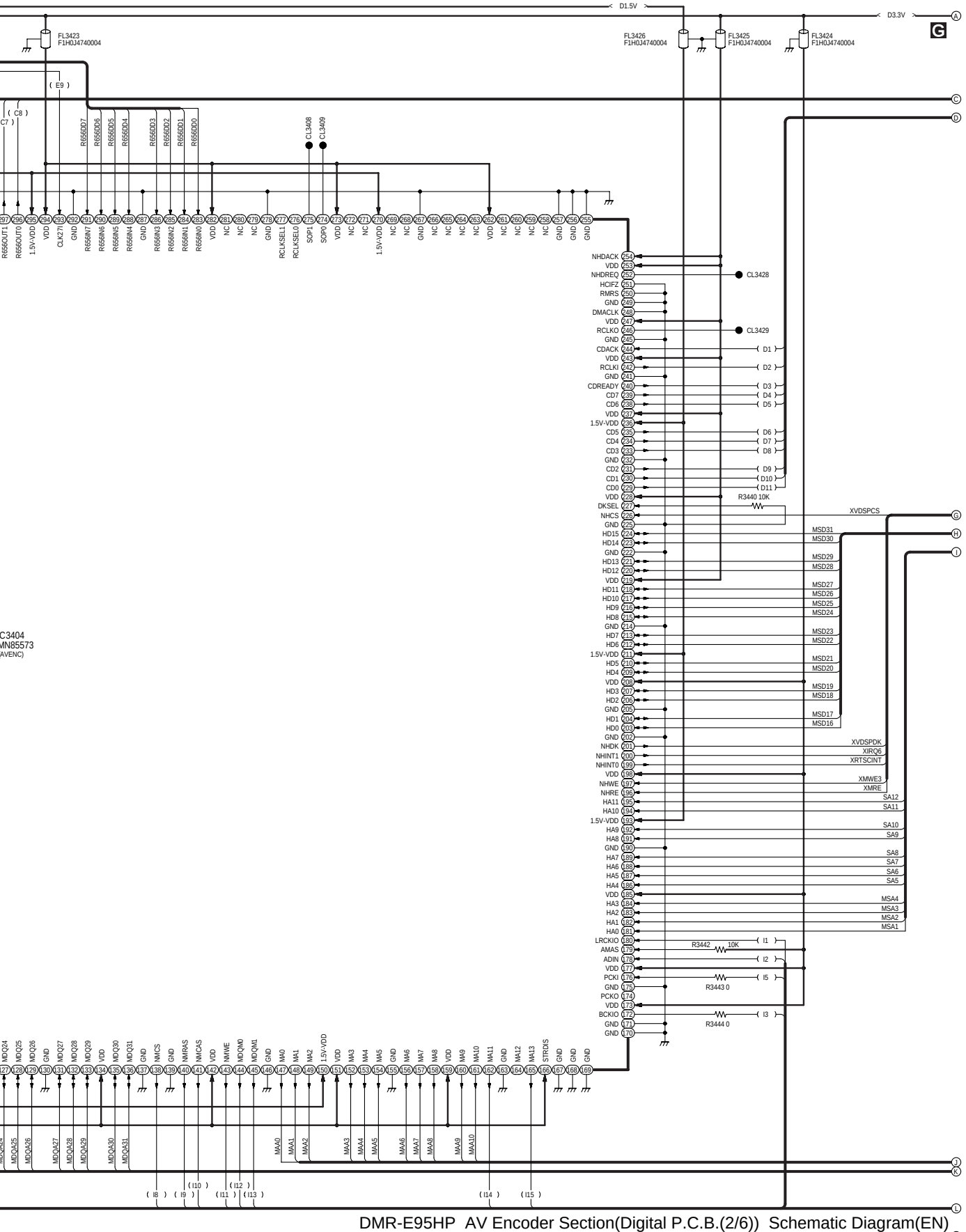



DMR-E95HP AV Encoder Section(Digital P.C.B.(2/6)) Schematic Diagram(EN)



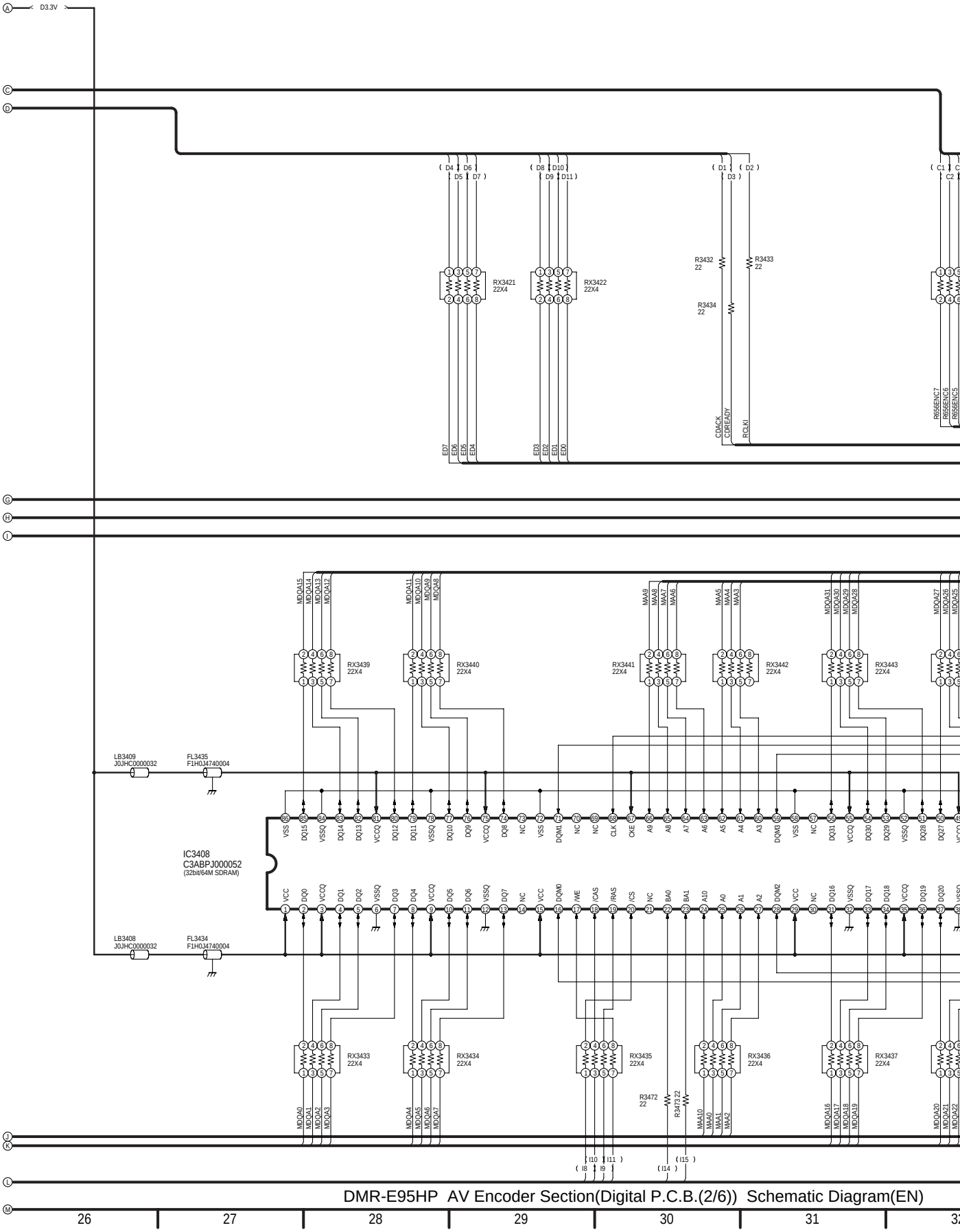

DMR-E95HP AV Encoder Section(Digital P.C.B.(2/6)) Schematic Diagram(EN)

13 | 14 | 15 | 16 | 17 | 18 | 19




DMR-E95HP AV Encoder Section(Digital P.C.B.(2/6)) Schematic Diagram(EN)

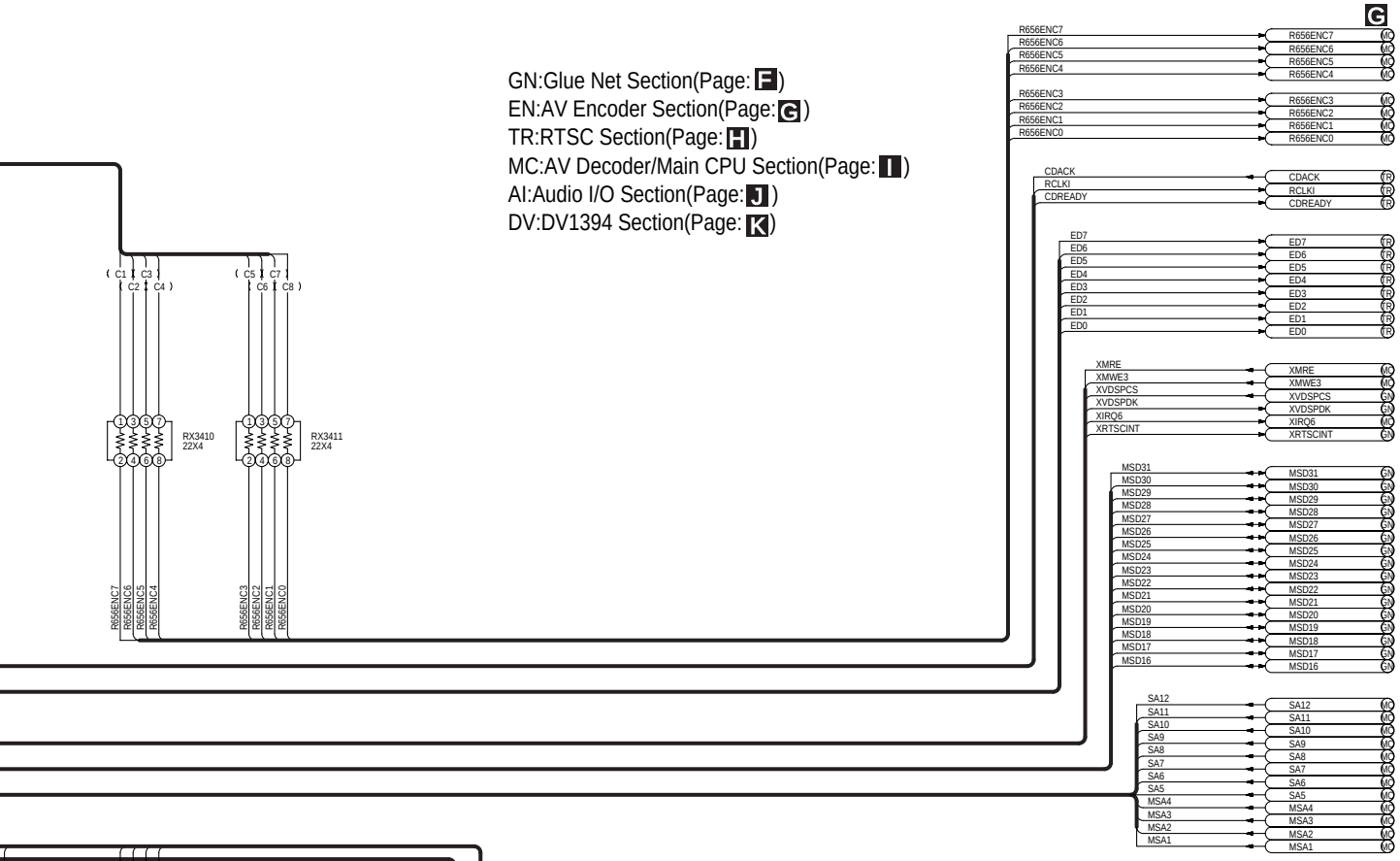
20 21 22 23 24 25

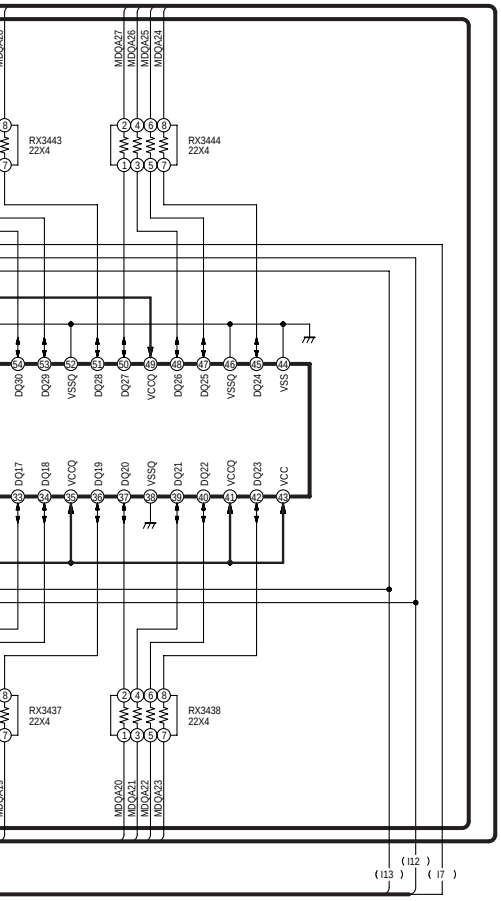



DMR-E95HP AV Encoder Section(Digital P.C.B.(2/6)) Schematic Diagram(EN)

26 | 27 | 28 | 29 | 30 | 31 | 32

GN:Glue Net Section(Page: F )
EN:AV Encoder Section(Page: G )
TR:RTSC Section(Page: H )
MC:AV Decoder/Main CPU Section(Page: I )
AI:Audio I/O Section(Page: J )
DV:DV1394 Section(Page: K )



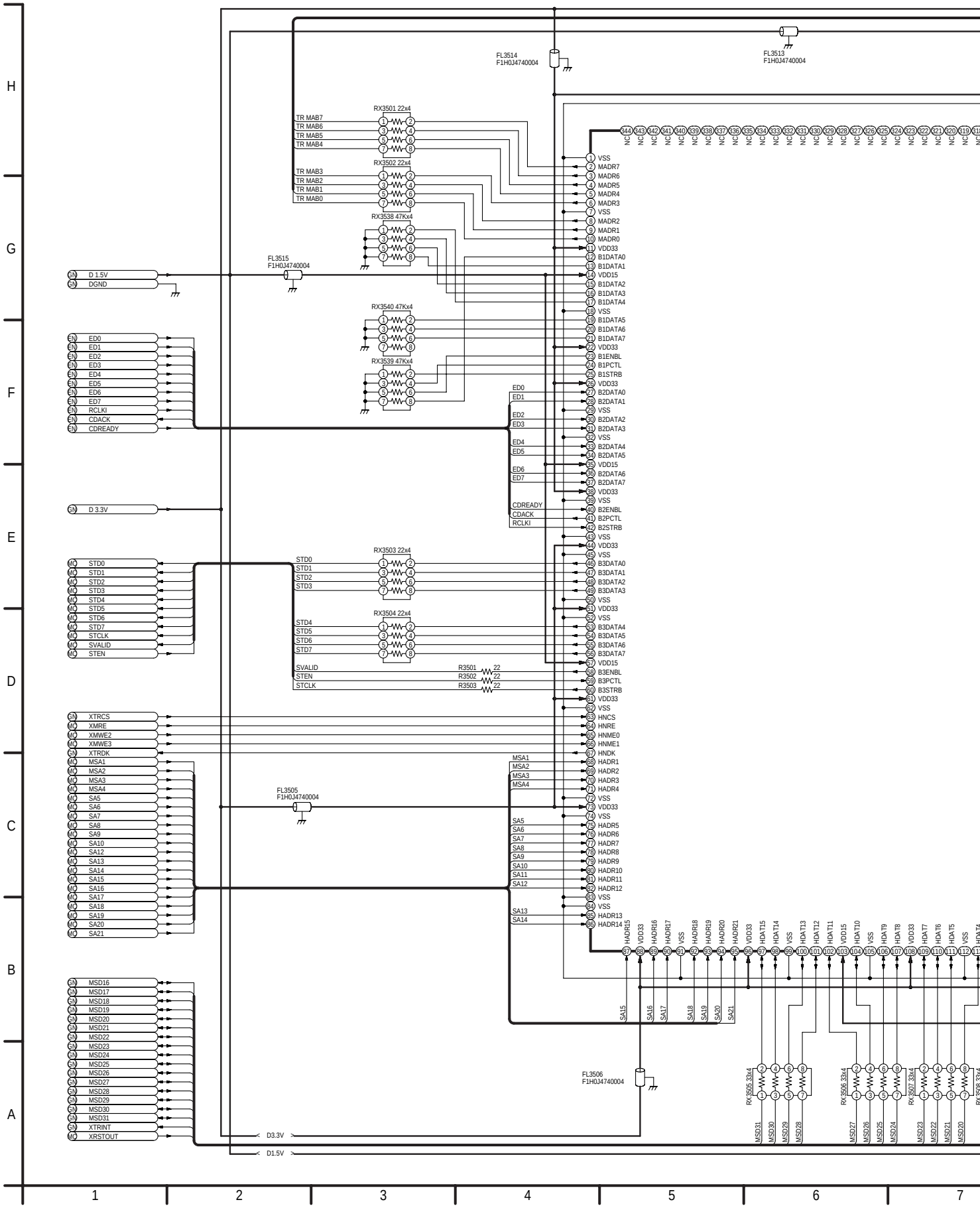

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.
THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE
SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E95HP
AV Encoder Section(Digital P.C.B.(2/6))
Schematic Diagram(EN)

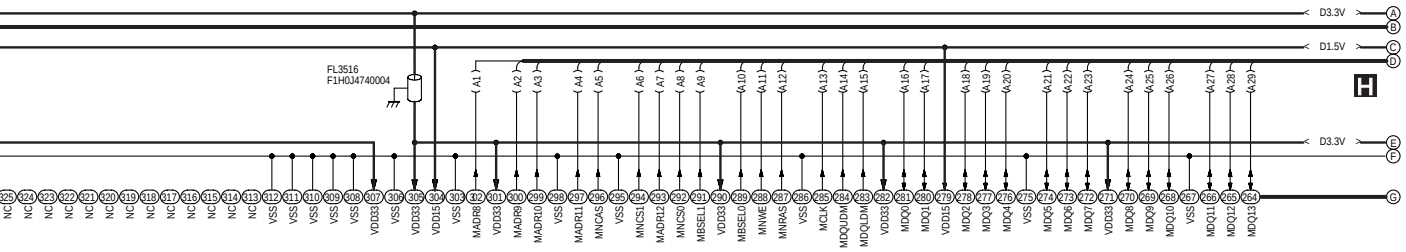
gram(EN)

32 33 34 35 36 37

# 18.10. Real Time Stream Control (RTSC) Section (Digital P.C.B. (3/6)) Schematic Diag

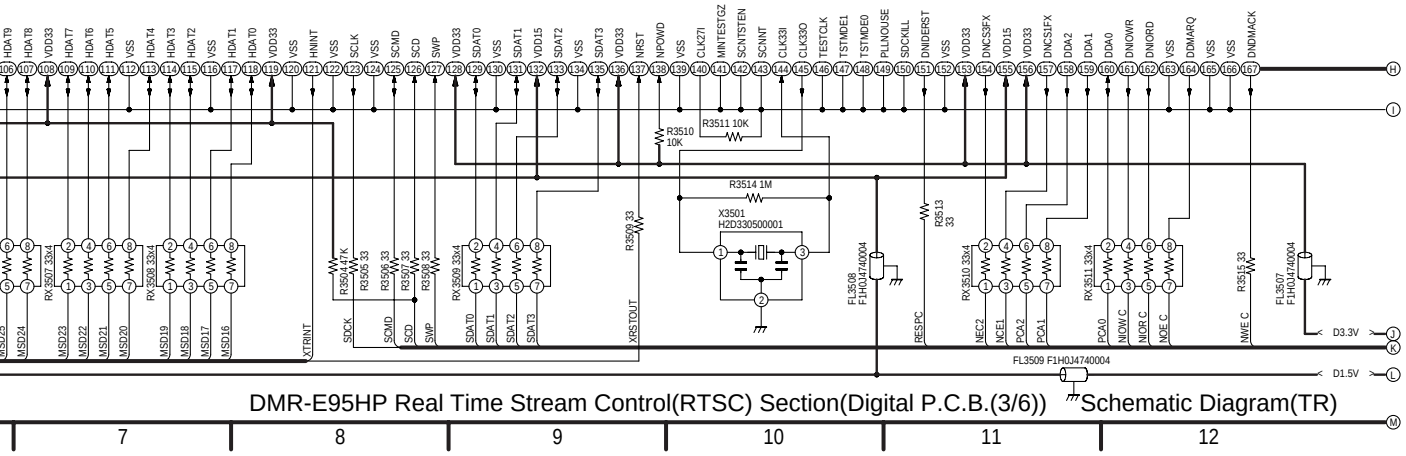


# atic Diagram (TR)

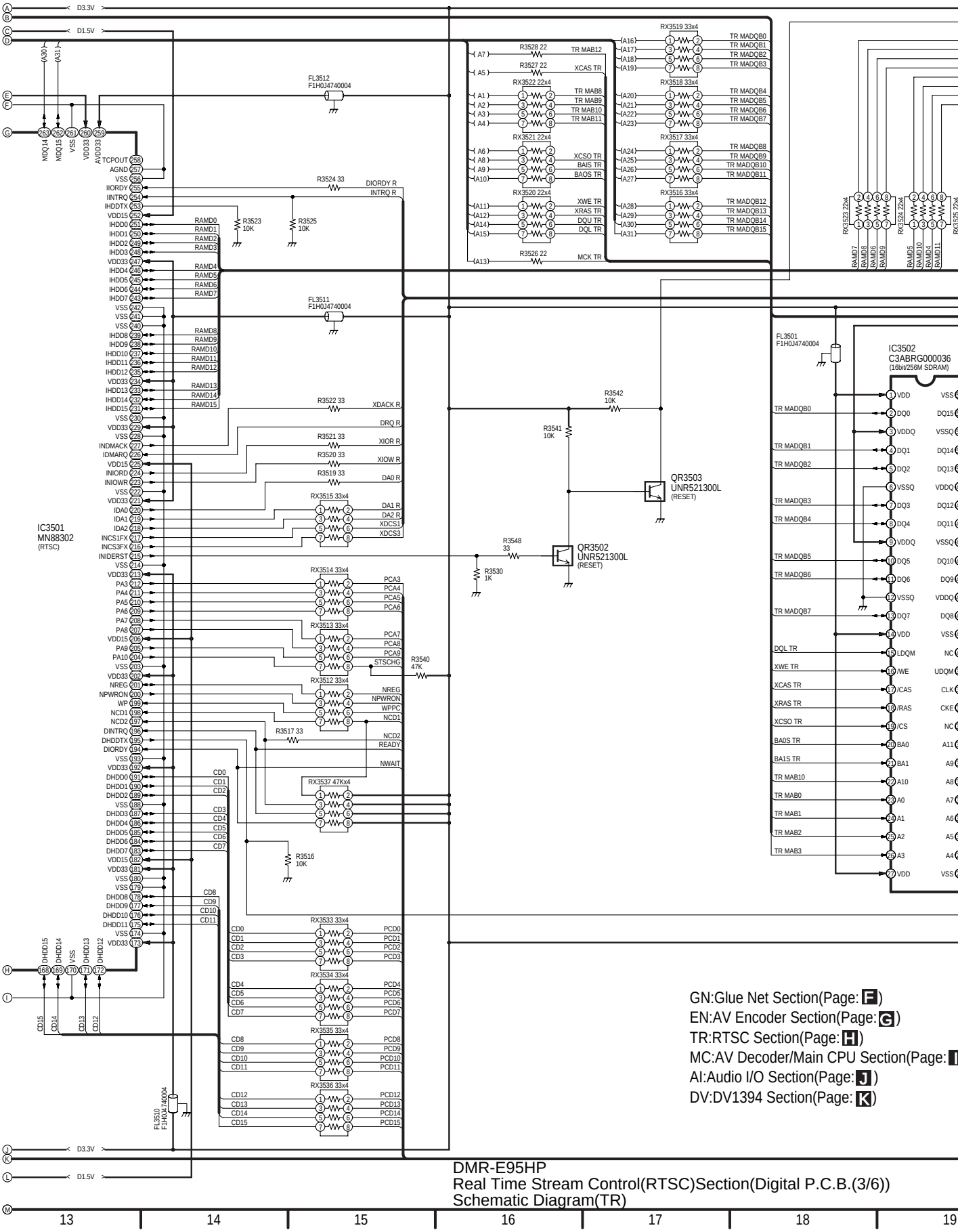



GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)
DV:DV1394 Section(Page: K)

IC3501
MN88302
(RTSC)

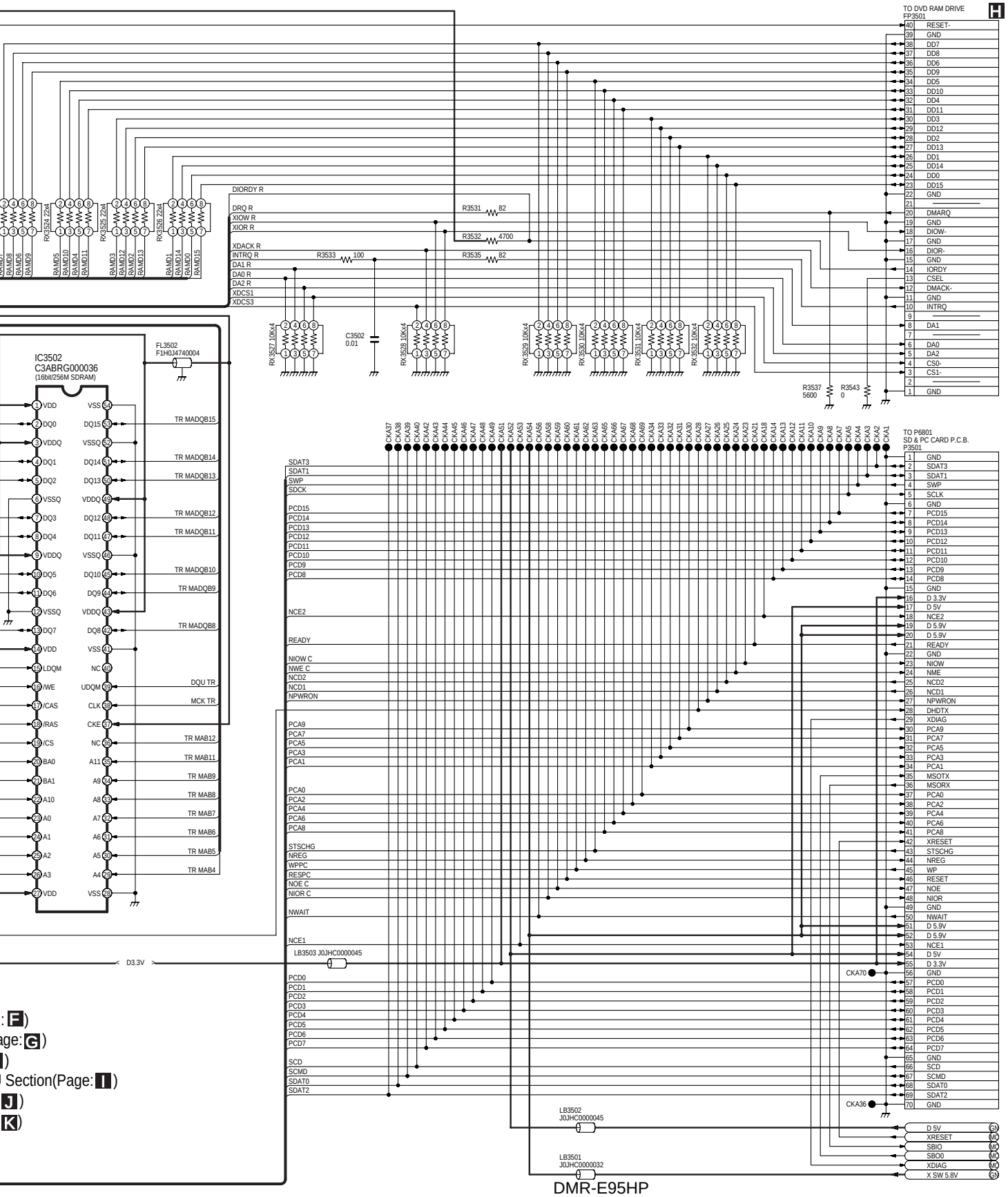



DMR-E95HP Real Time Stream Control(RTSC) Section(Digital P.C.B.(3/6)) Schematic Diagram(TR)



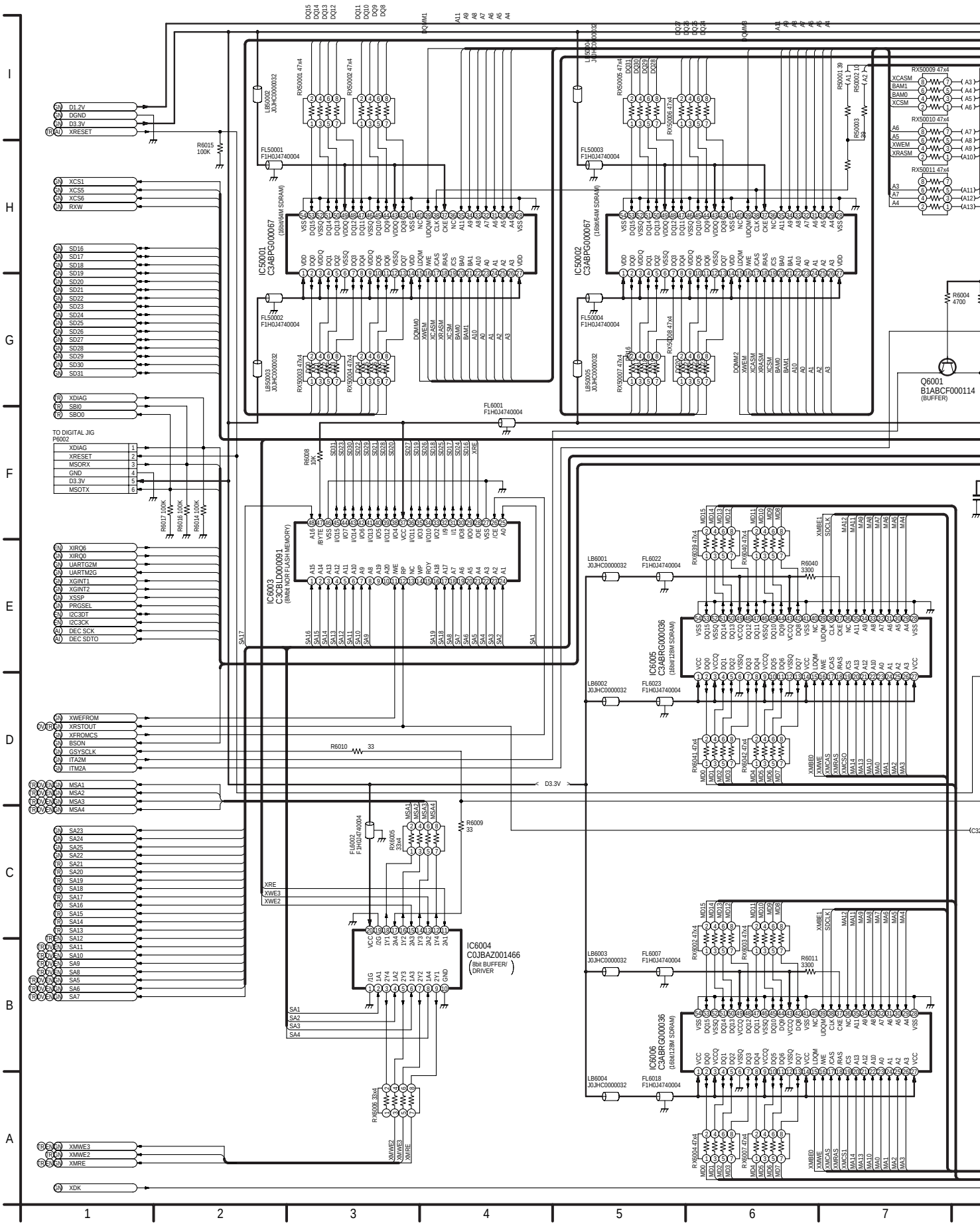

GN:Glue Net Section(Page: F )
EN:AV Encoder Section(Page: G )
TR:RTSC Section(Page: H )
MC:AV Decoder/Main CPU Section(Page: I )
AI:Audio I/O Section(Page: J )
DV:DV1394 Section(Page: K )

DMR-E95HP
Real Time Stream Control(RTSC)Section(Digital P.C.B.(3/6))
Schematic Diagram(TR)

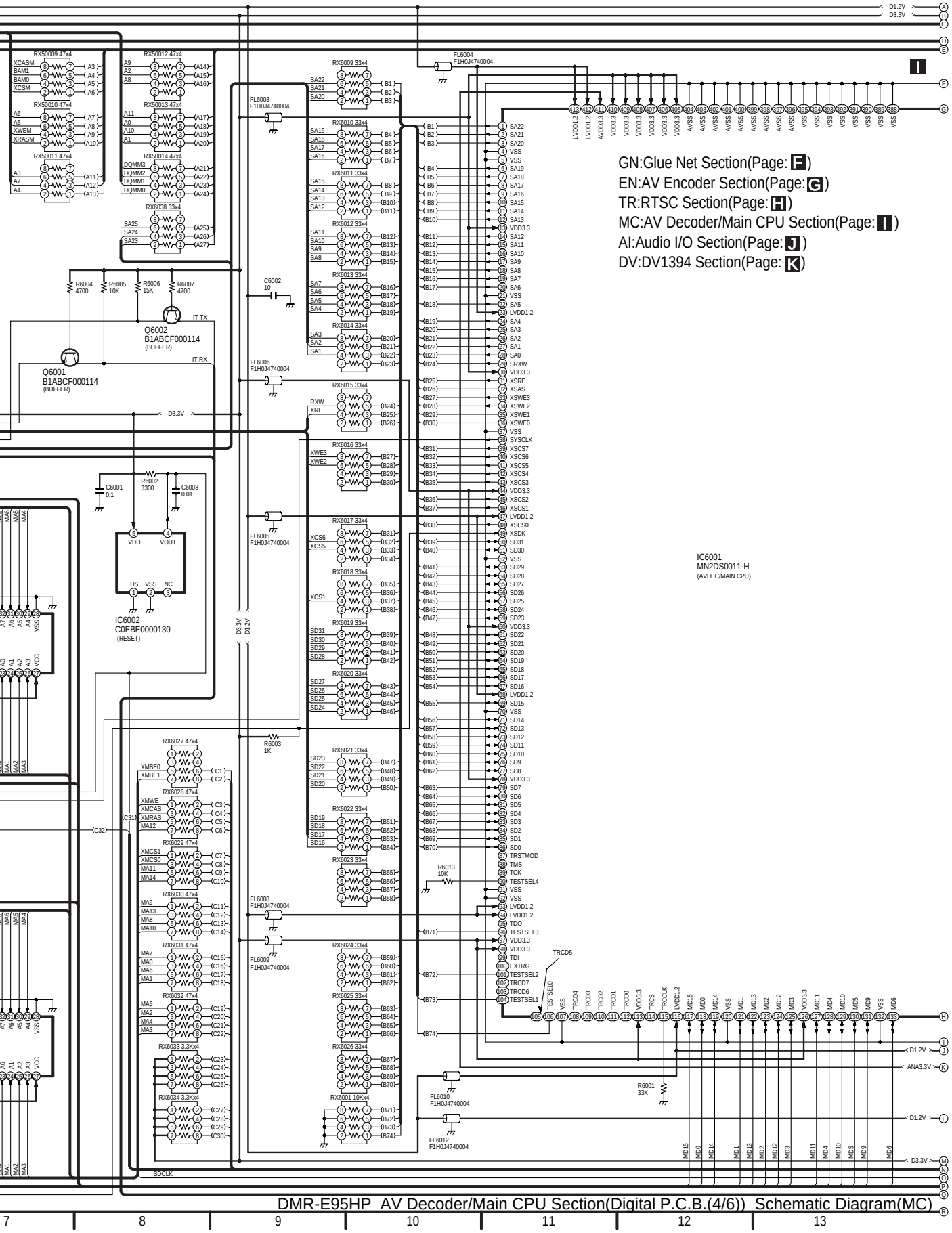



NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

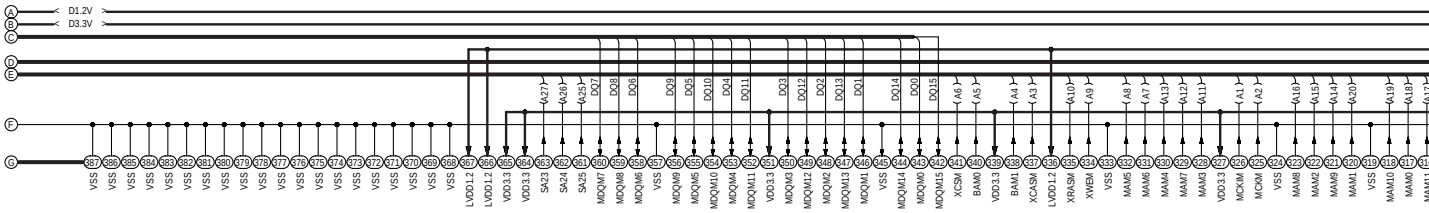
# 18.11. AV Decoder/Main CPU Section (Digital P.C.B. (4/6)) Schematic Diagram (MC)



# n (MC)

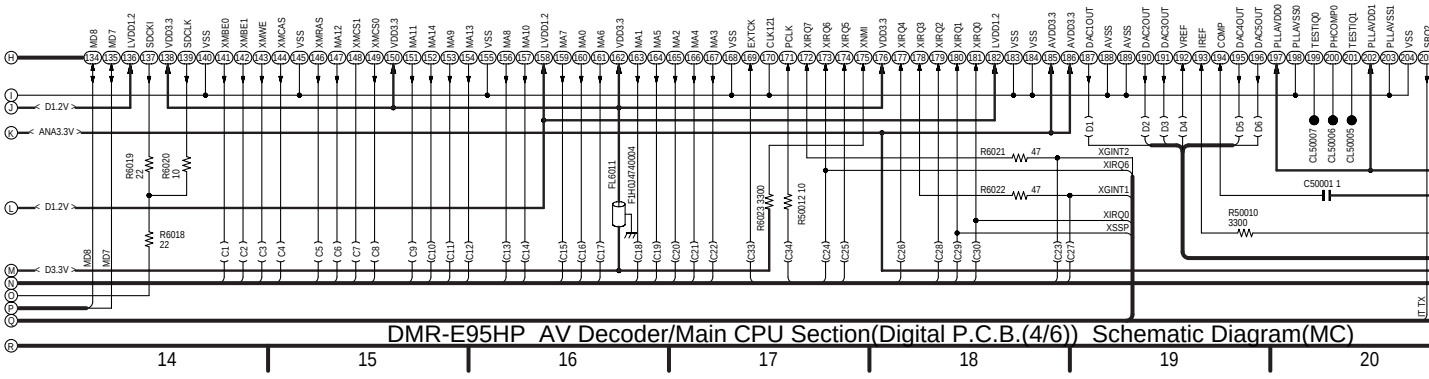



DMR-E95HP AV Decoder/Main CPU Section(Digital P.C.B.(4/6)) Schematic Diagram(MC)

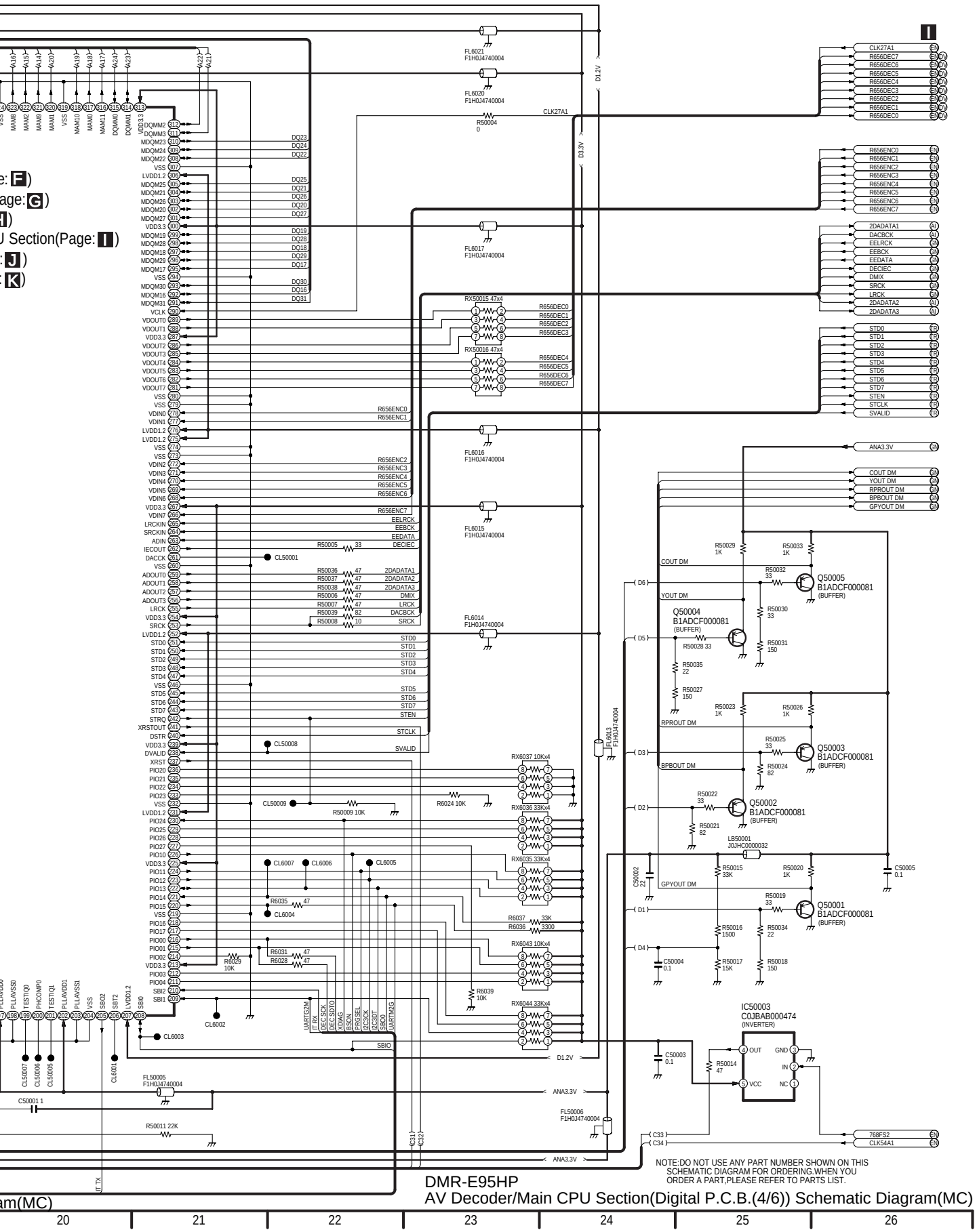


GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page:
AI:Audio I/O Section(Page: J)
DV:DV1394 Section(Page: K)

IC6001
MN2DS0011-H
(AVDEC/MAIN CPU)



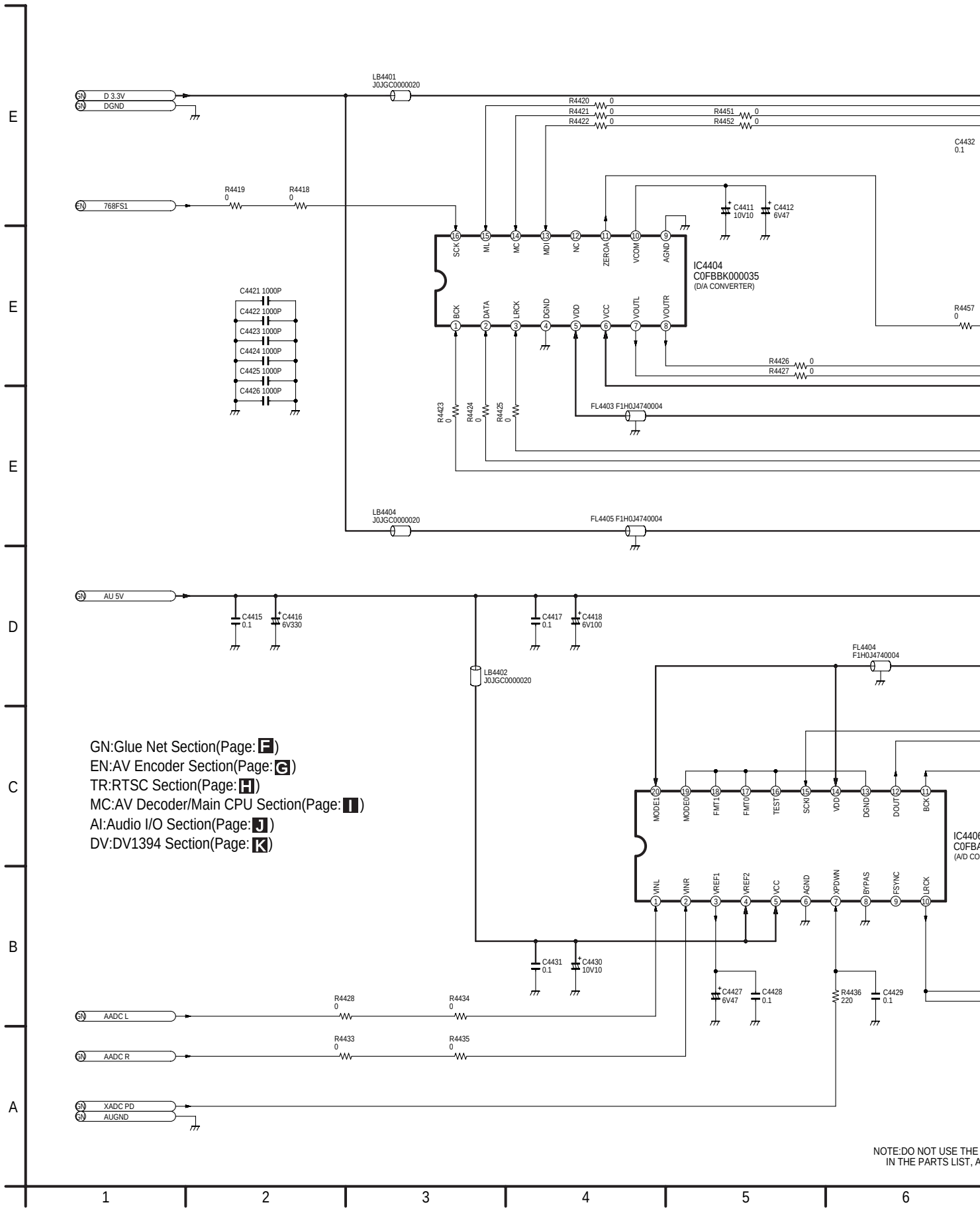
DMR-E95HP AV Decoder/Main CPU Section(Digital P.C.B.(4/6)) Schematic Diagram(MC)

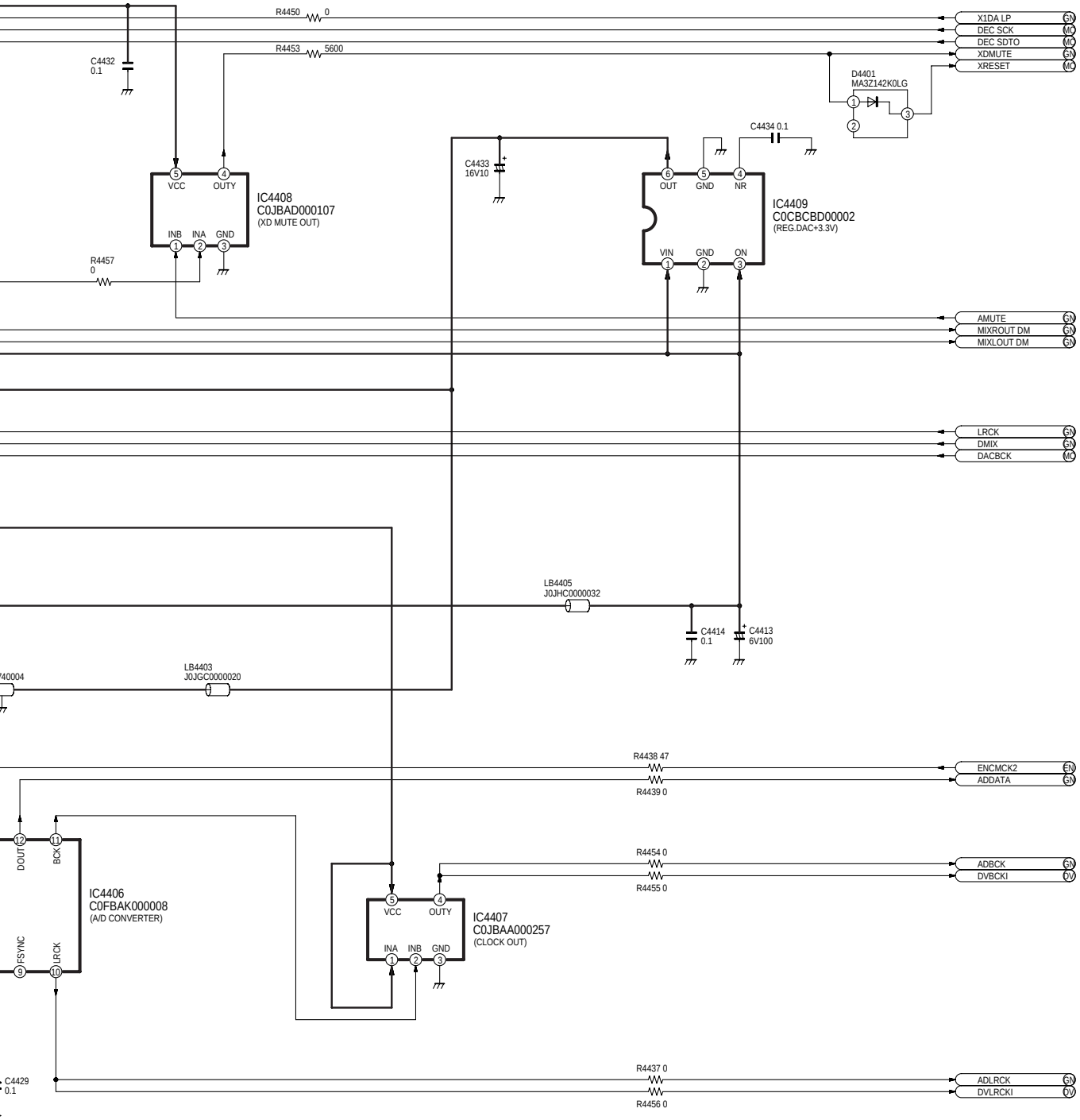



DMR-E95HP

AV Decoder/Main CPU Section(Digital P.C.B.(4/6)) Schematic Diagram(MC)

# 18.12. Audio I/O Section (Digital P.C.B. (5/6)) Schematic Diagram (AI)



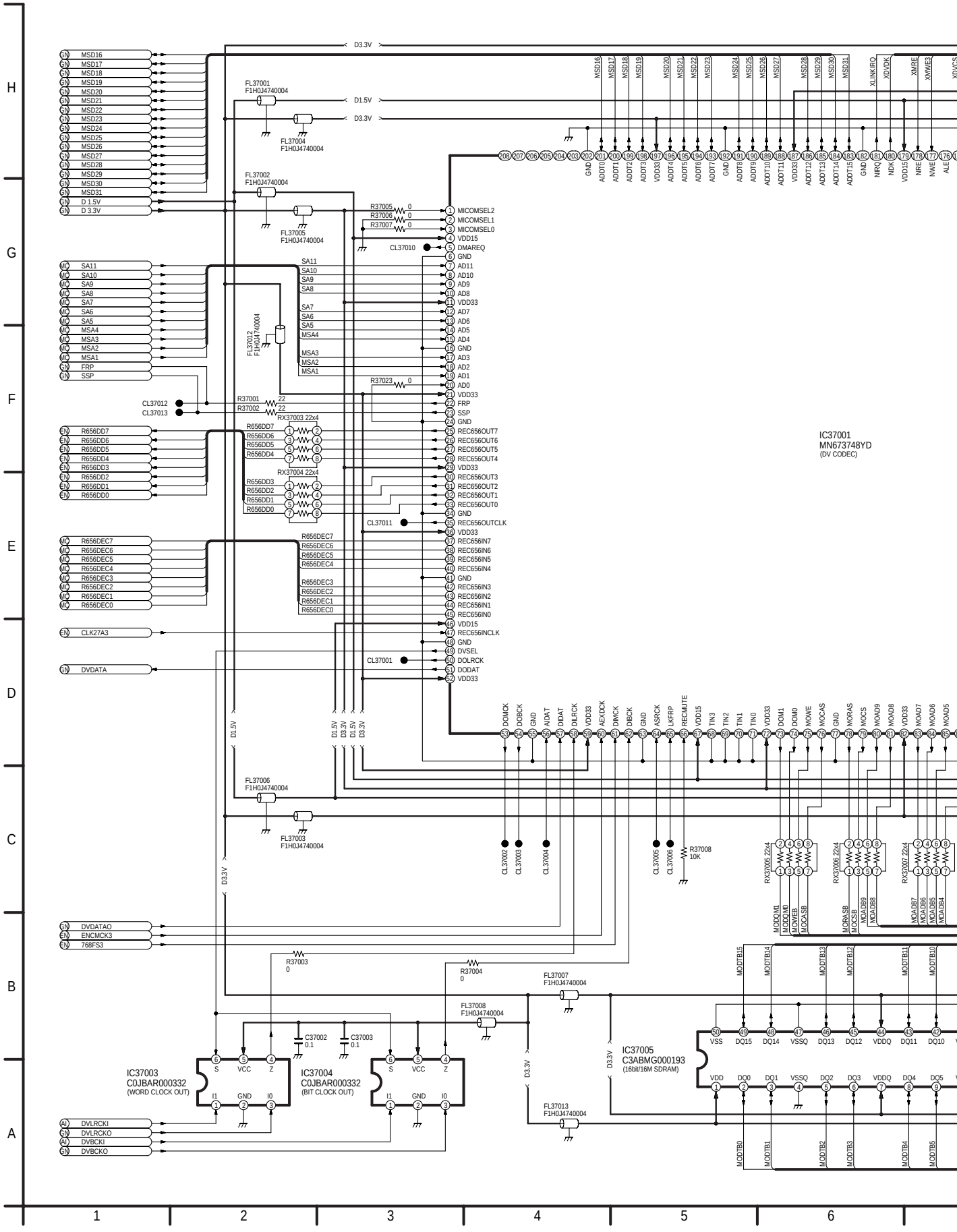


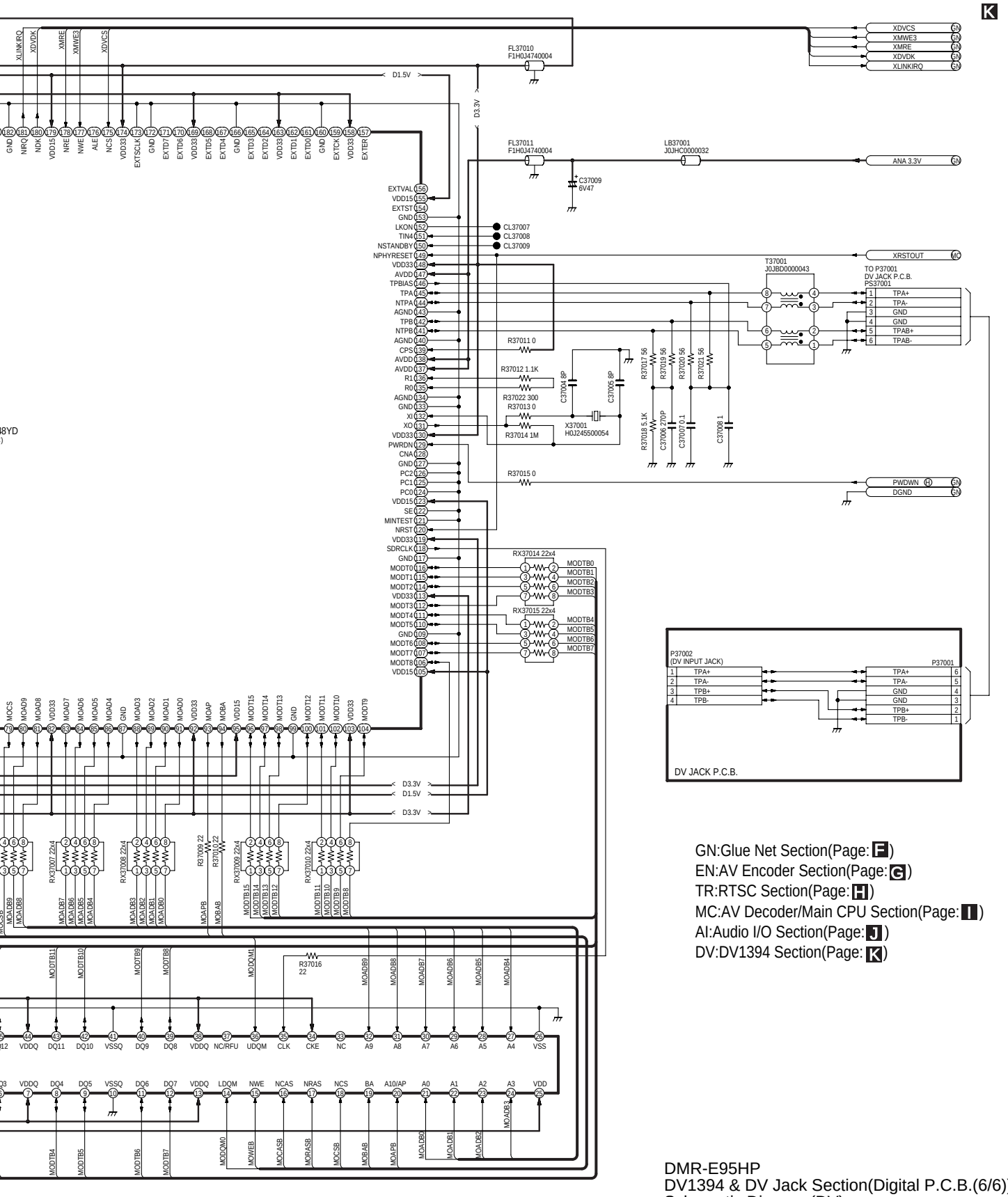

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E95HP
Audio I/O Section(Digital P.C.B.(5/6))
Schematic Diagram(AI)

| 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|

# 18.13. DV1394 & DV Jack Section (Digital P.C.B. (6/6)) Schematic Diagram (DV)



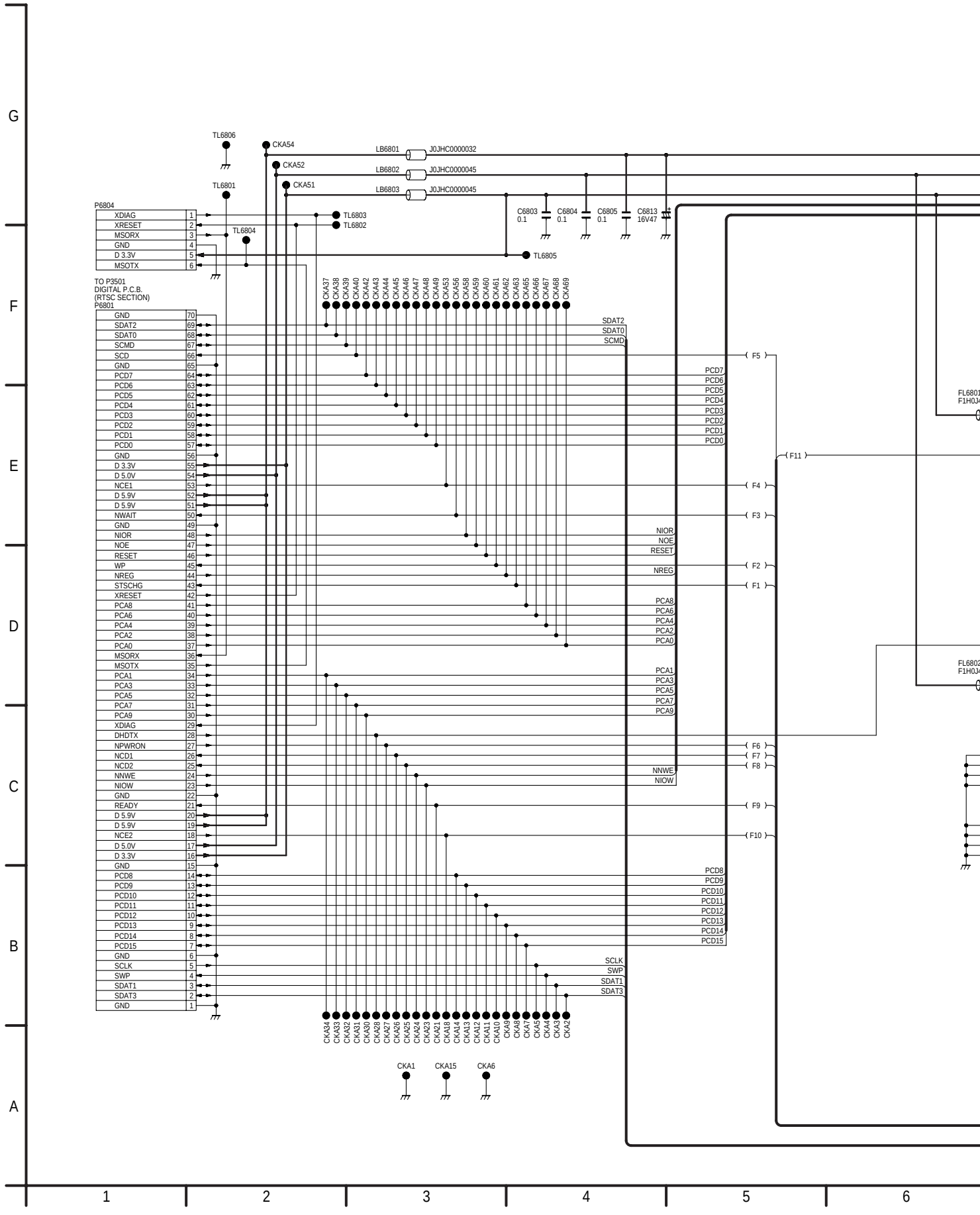


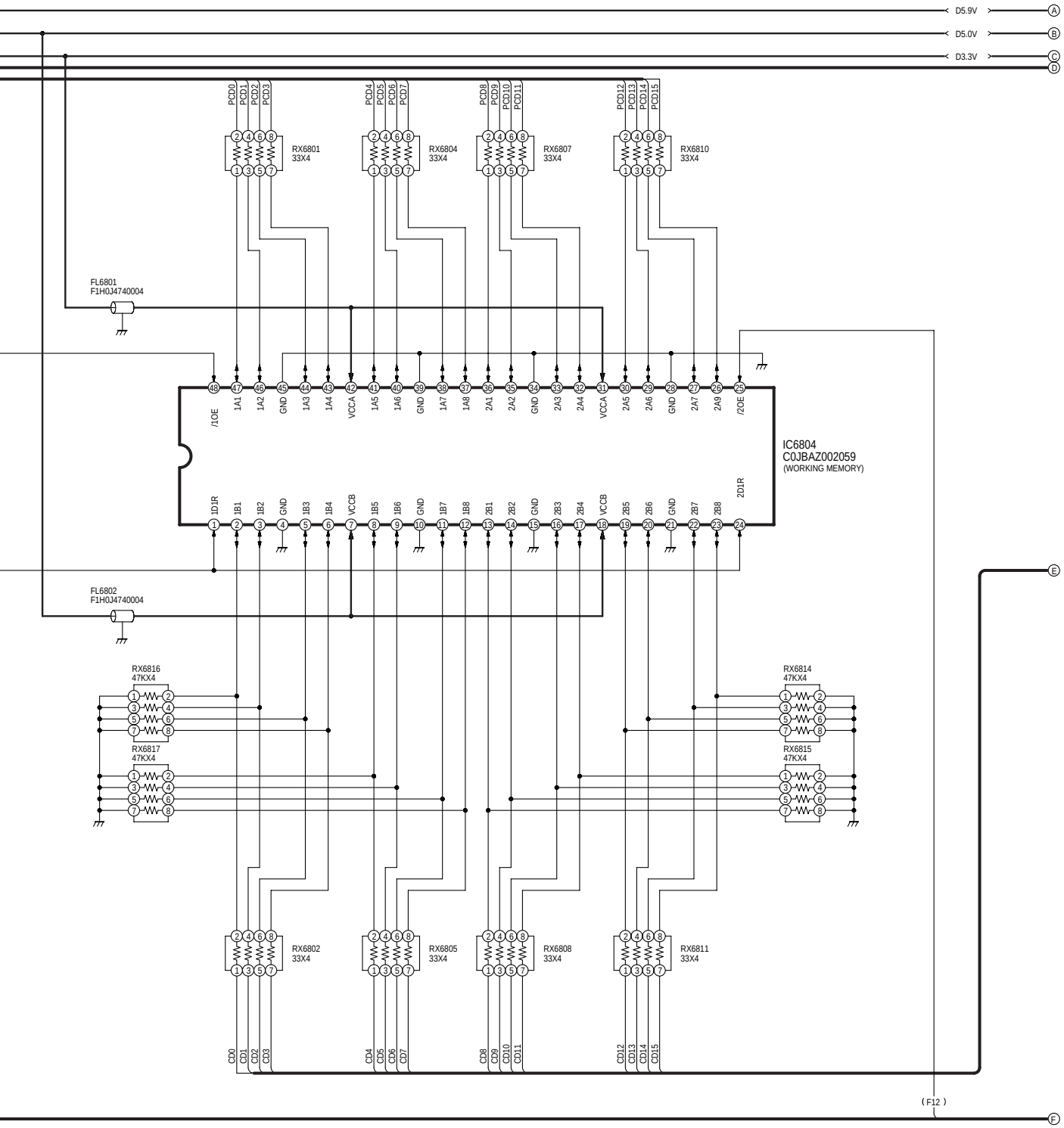

GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)
DV:DV1394 Section(Page: K)

DMR-E95HP
DV1394 & DV Jack Section(Digital P.C.B.(6/6))
Schematic Diagram(DV)

7 8 9 10 11 12

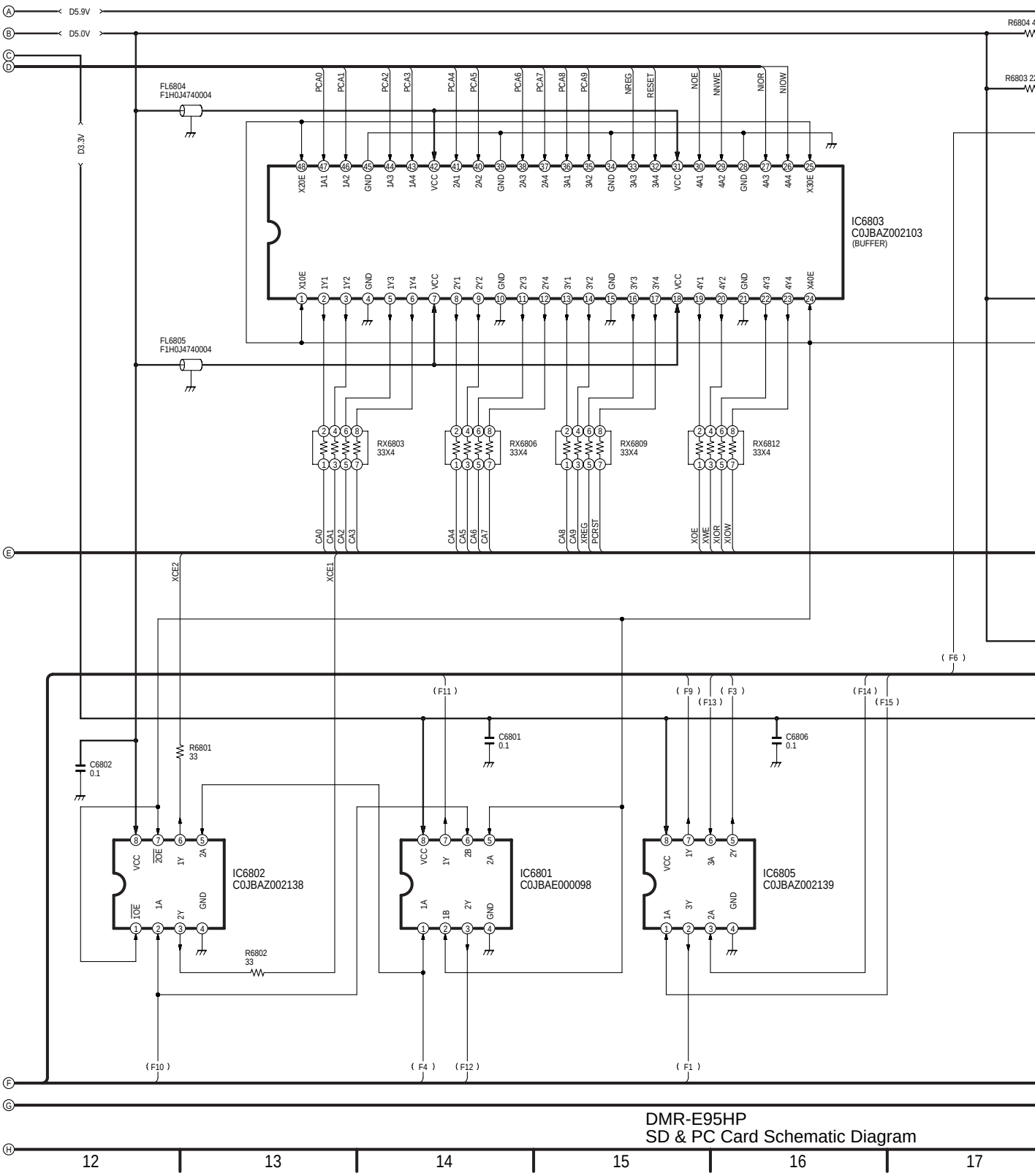
# 18.14. SD & PC Card Schematic Diagram

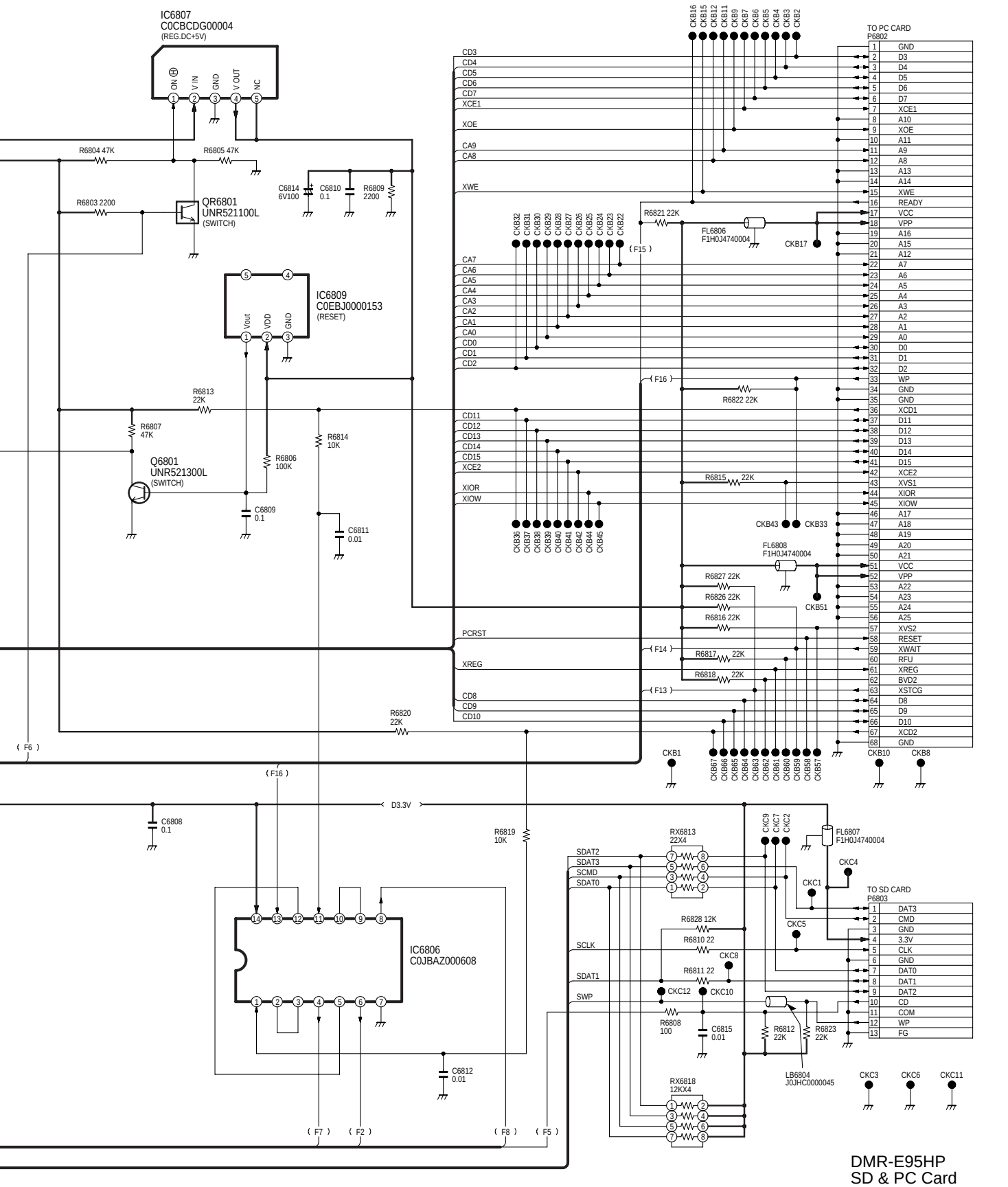





DMR-E95HP
SD & PC Card Schematic Diagram

6 | 7 | 8 | 9 | 10 | 11

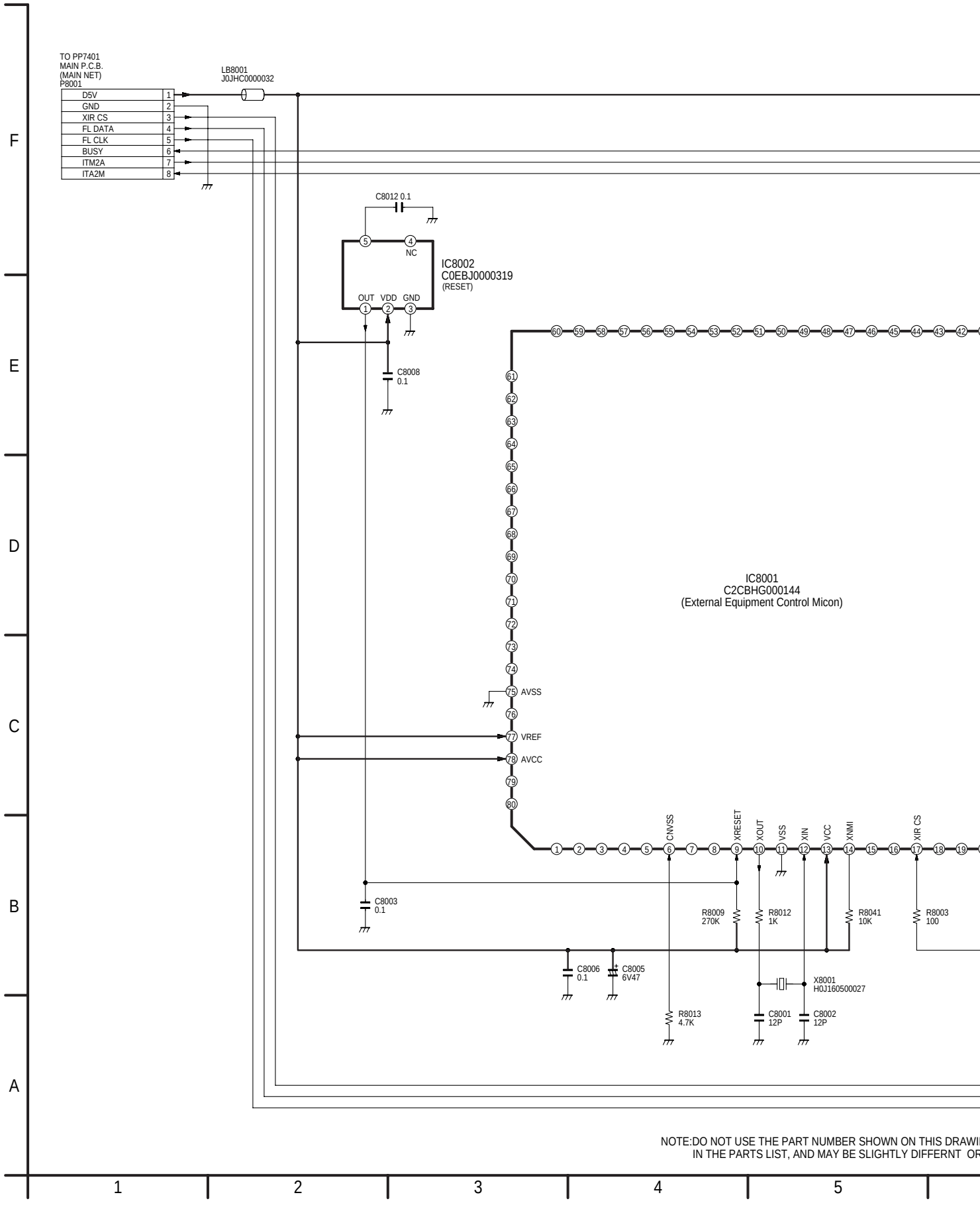

D5.9V
D5.0V
D3.3V
FL6804
F1H0J4740004
FL6805
F1H0J4740004
IC6803
C0JBAZ002103
(BUFFER)
RX6803
33X4
RX6806
33X4
RX6809
33X4
RX6812
33X4
C6801
0.1
C6802
0.1
C6806
0.1
R6801
33
R6802
33
IC6802
C0JBAZ002138
IC6801
C0JBAE000098
IC6805
C0JBAZ002139
XCE2
XCE1
( F6 )
( F11 )
( F9 )
( F13 )
( F3 )
( F14 )
( F15 )
( F10 )
( F4 )
( F12 )
( F1 )
DMR-E95HP
SD & PC Card Schematic Diagram
12
13
14
15
16
17

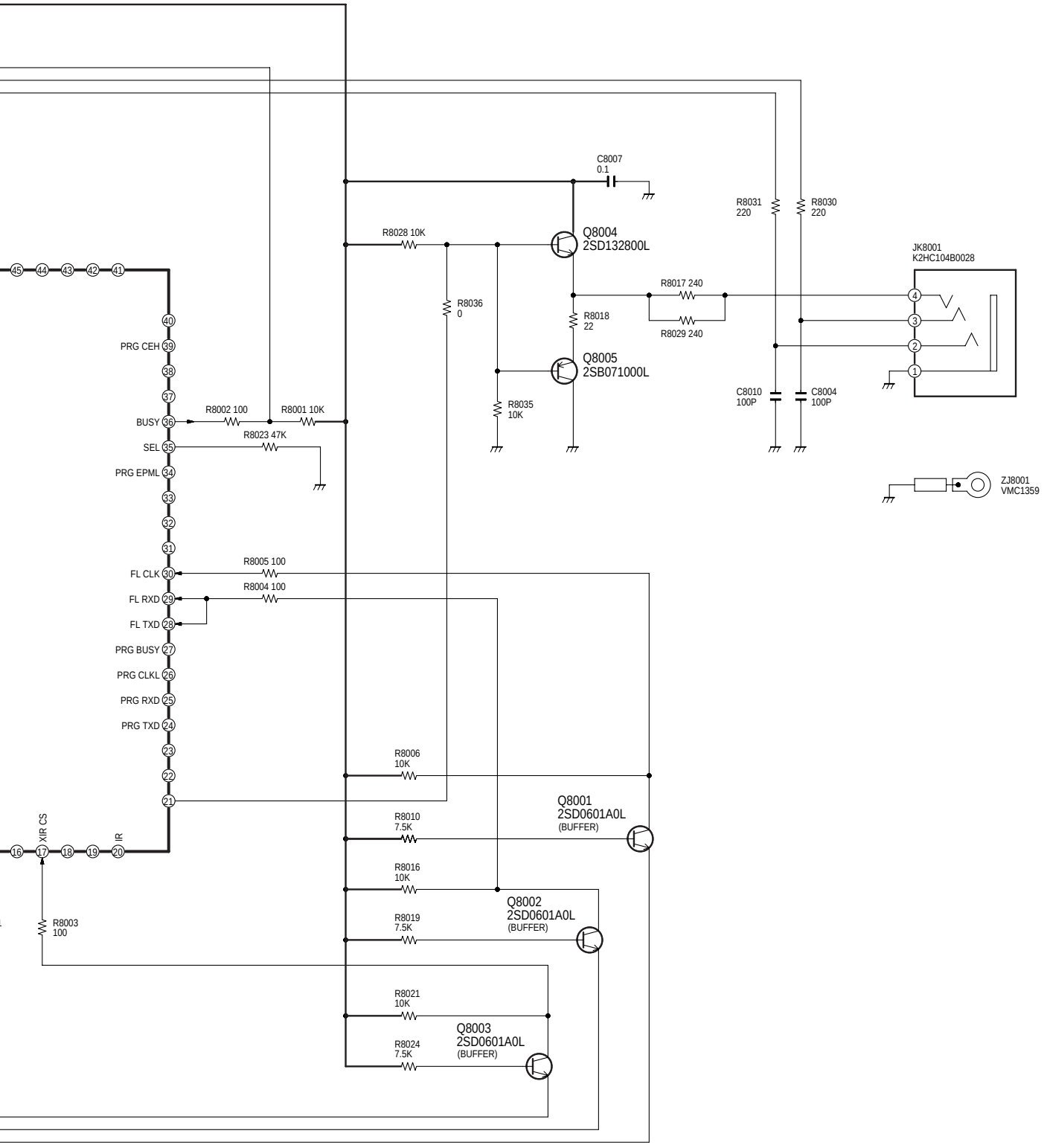



DMR-E95HP
SD & PC Card
Schematic Diagram

| 17 | 18 | 19 | 20 | 21 | 22 |
|---|---|---|---|---|---|

# 18.15. IR Schematic Diagram



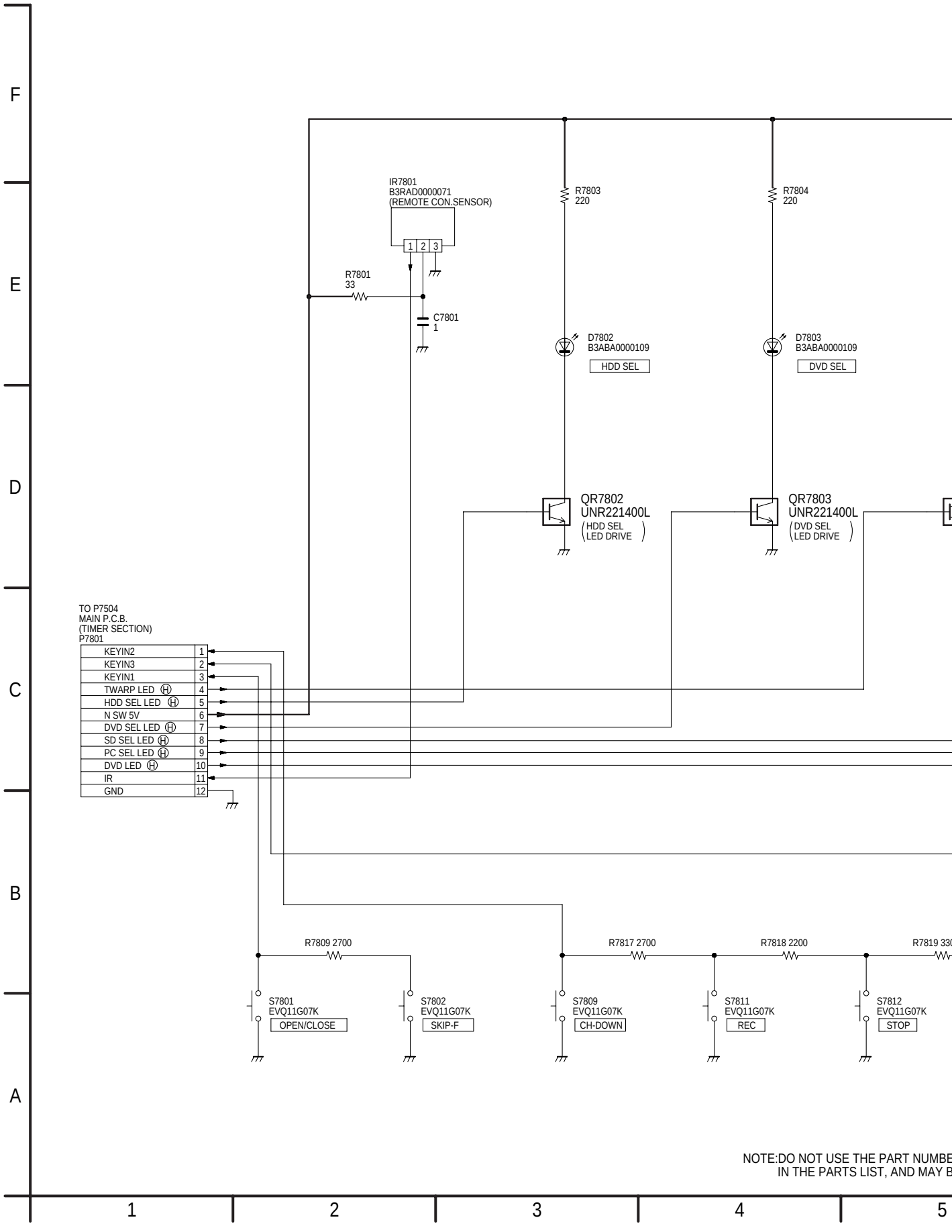


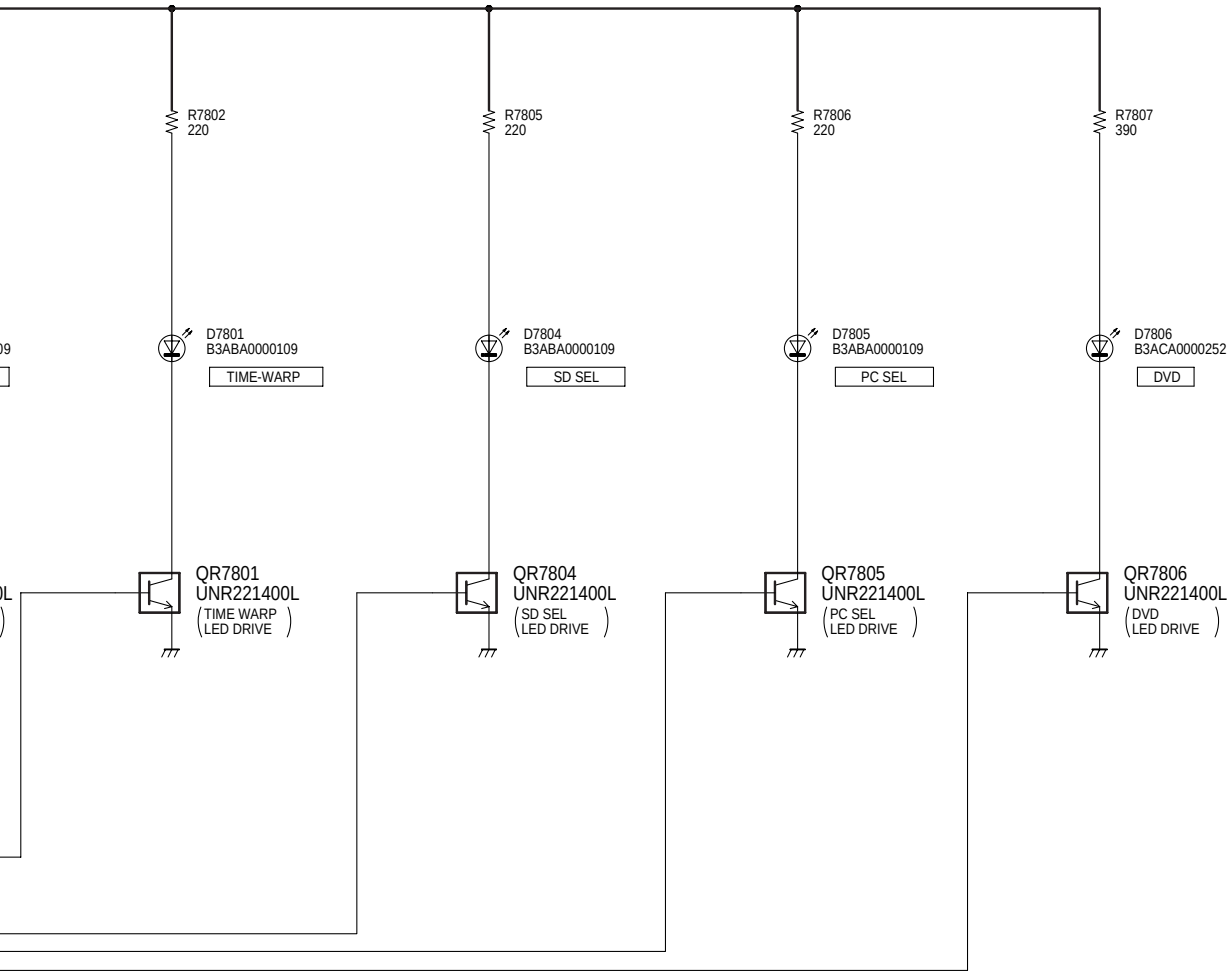

OWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN
GHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

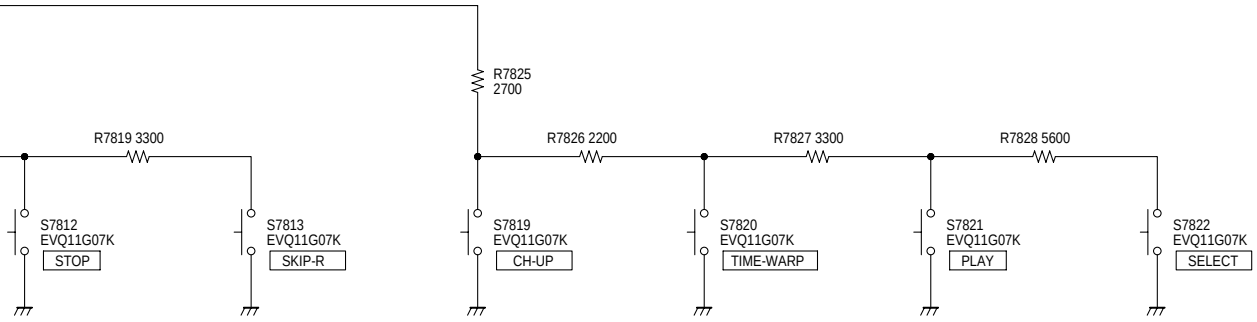
DMR-E95HP
IR Schematic Diagram

6 | 7 | 8 | 9 | 10

# 18.16. Front (R) Schematic Diagram



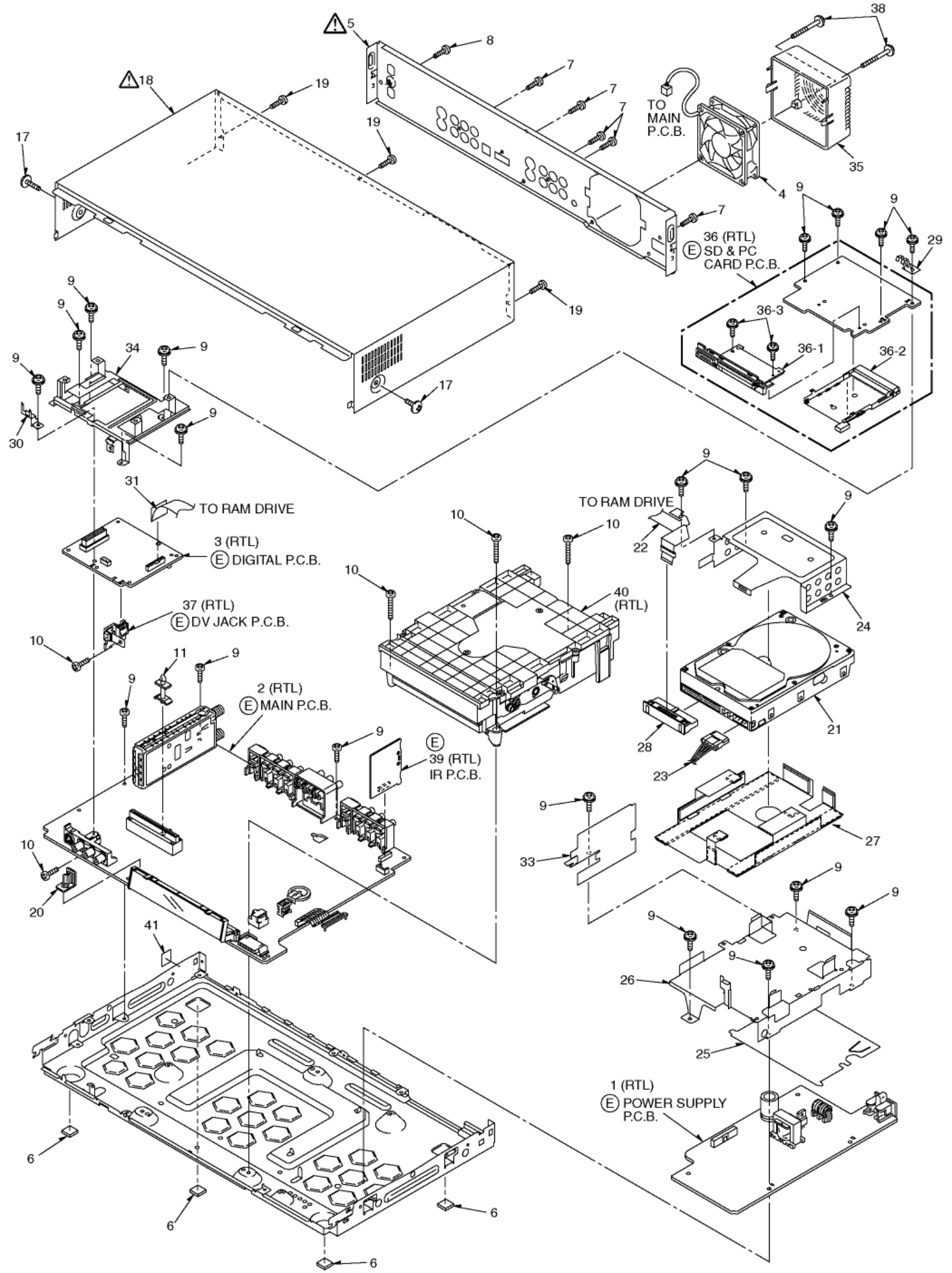


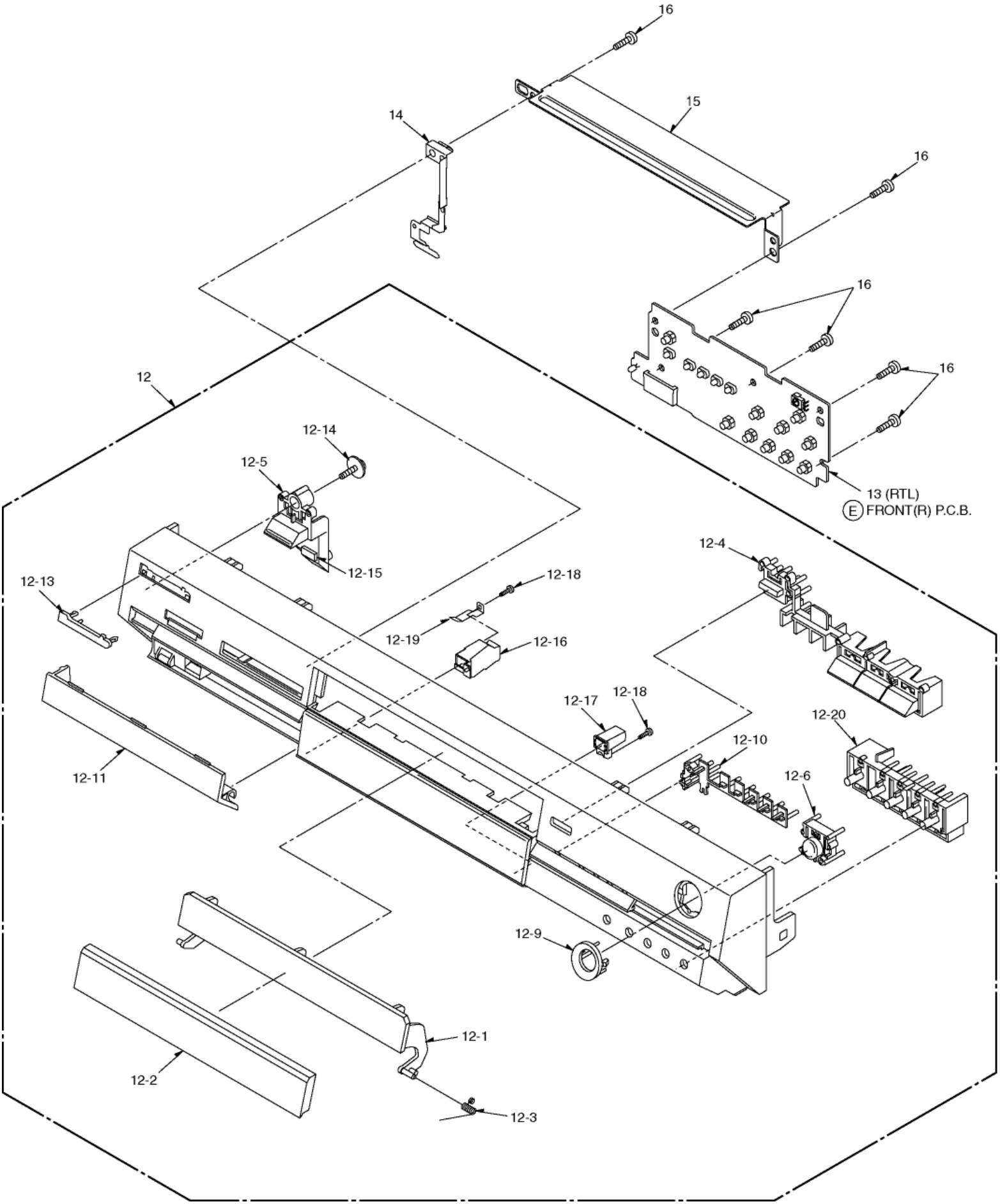



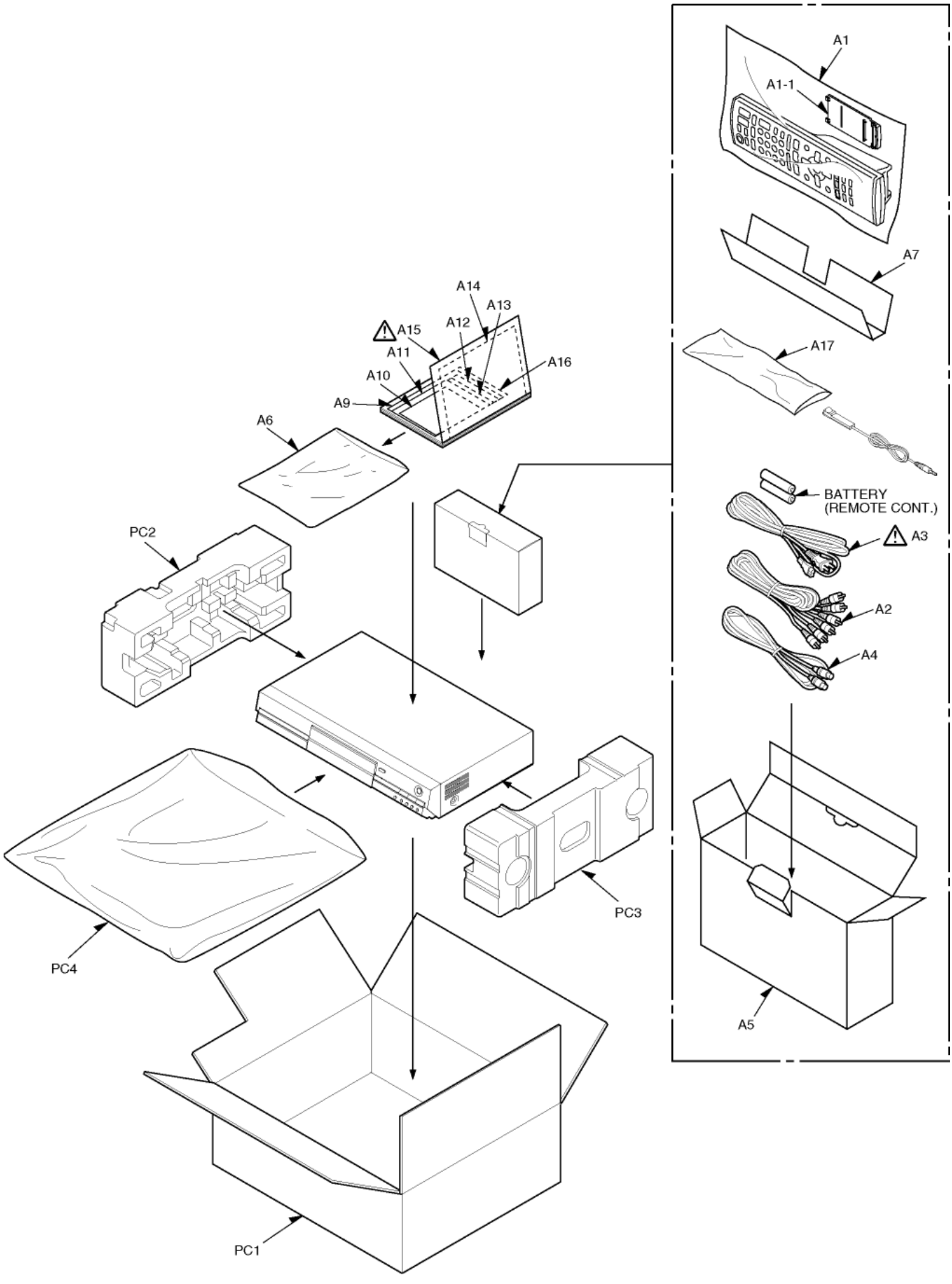

THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN
S LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E95HP
Front(R)
Schematic Diagram

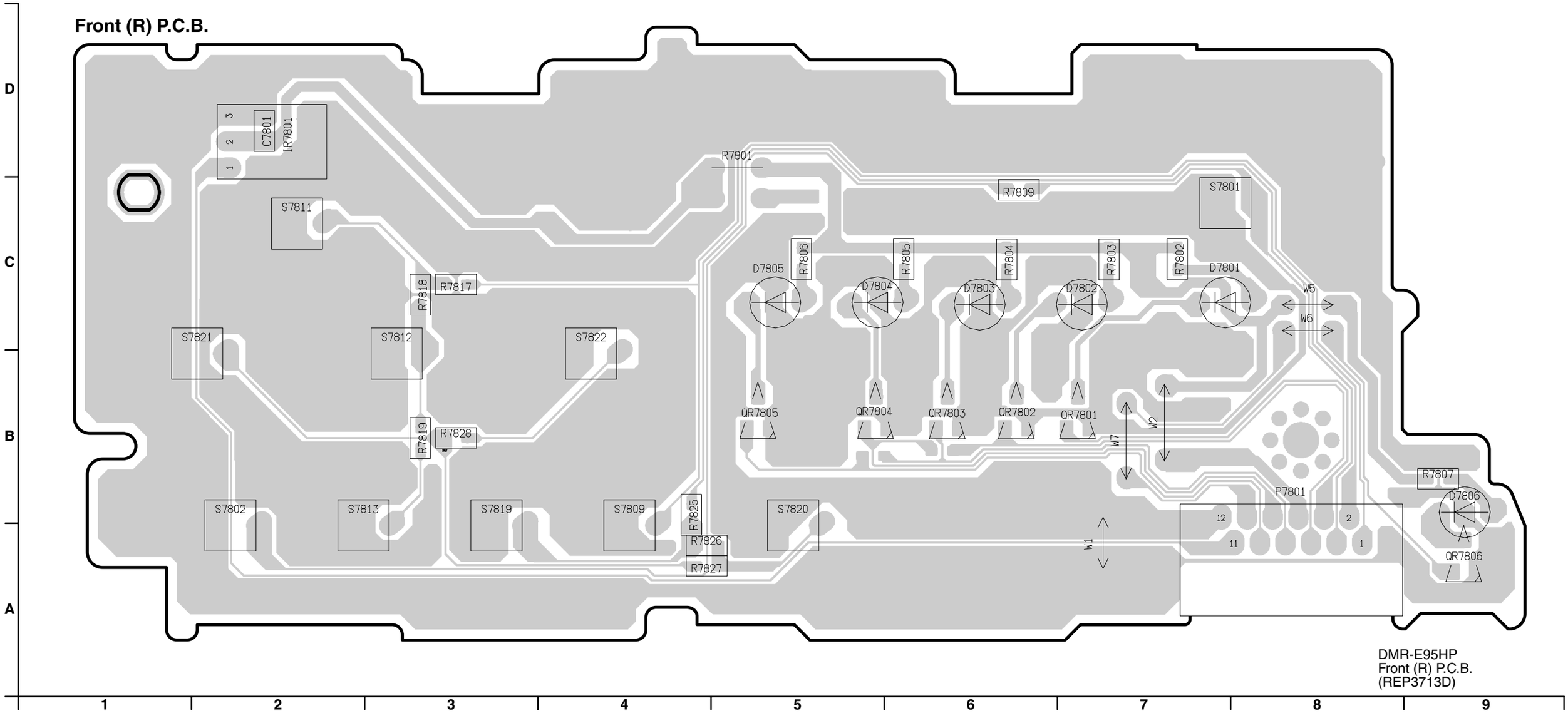
5 | 6 | 7 | 8 | 9


5
8
7
7
7
7
38
TO
MAIN
P.C.B.
35
4
18
19
19
17
19
36 (RTL)
Ⓔ SD & PC
CARD P.C.B.
29
36-3
36-1
36-2
34
30
17
31
TO RAM DRIVE
3 (RTL)
Ⓔ DIGITAL P.C.B.
37 (RTL)
Ⓔ DV JACK P.C.B.
11
2 (RTL)
Ⓔ MAIN P.C.B.
39 (RTL)
IR P.C.B.
40
(RTL)
TO RAM DRIVE
22
24
21
28
23
27
33
26
25
1 (RTL)
Ⓔ POWER SUPPLY
P.C.B.
20
41
6
6
6
6


16
15
14
16
16
16
12
13 (RTL)
(E) FRONT(R) P.C.B.
12-14
12-5
12-15
12-13
12-18
12-19
12-16
12-4
12-17
12-18
12-20
12-10
12-6
12-11
12-9
12-1
12-2
12-3

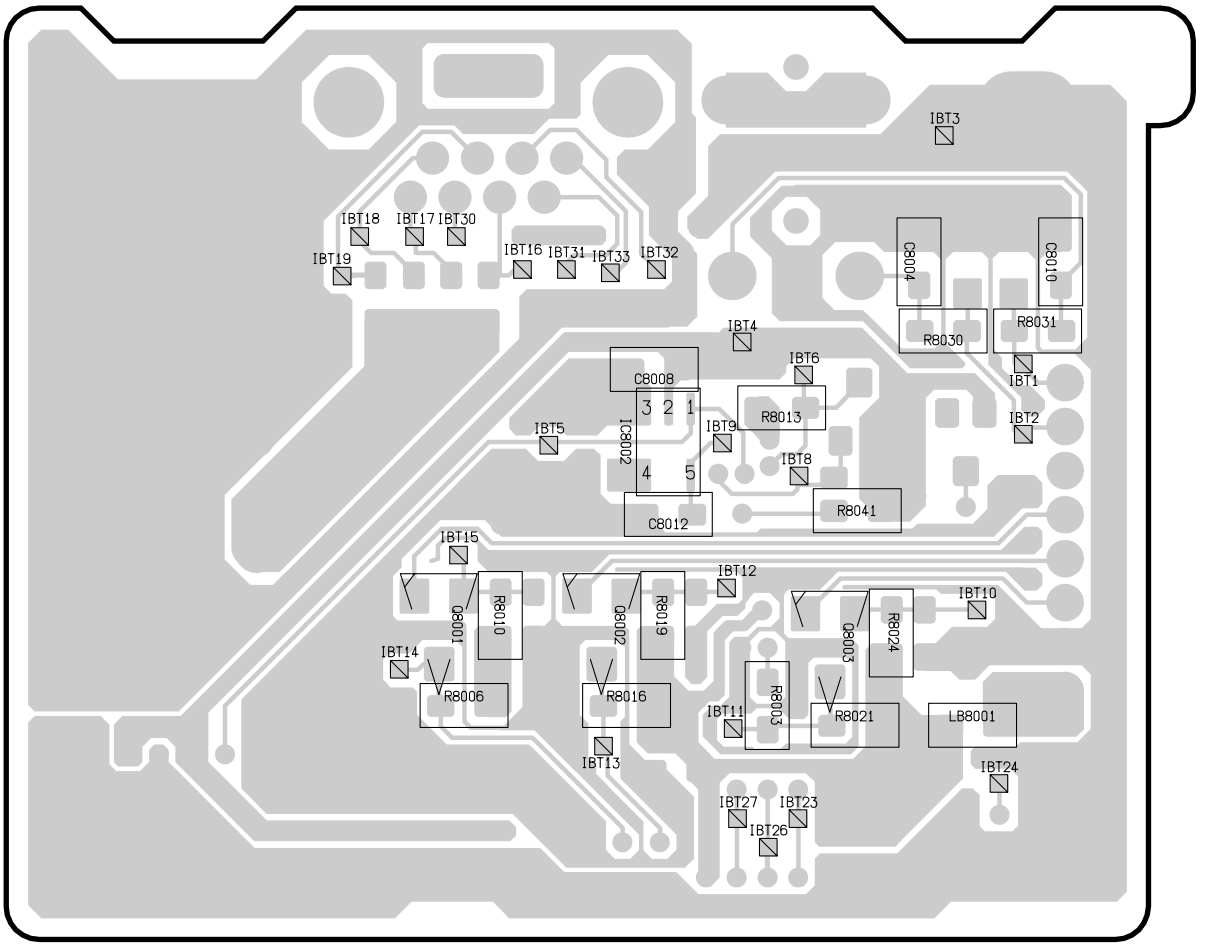

A1
A1-1
A7
A14
A13
A12
A15
A11
A16
A10
A9
A6
A17
BATTERY
(REMOTE CONT.)
A3
A2
A4
PC2
PC3
PC4
A5
PC1

**Front (R) P.C.B.**




DMR-E95HP
Front (R) P.C.B.
(REP3713D)

## IR P.C.B.



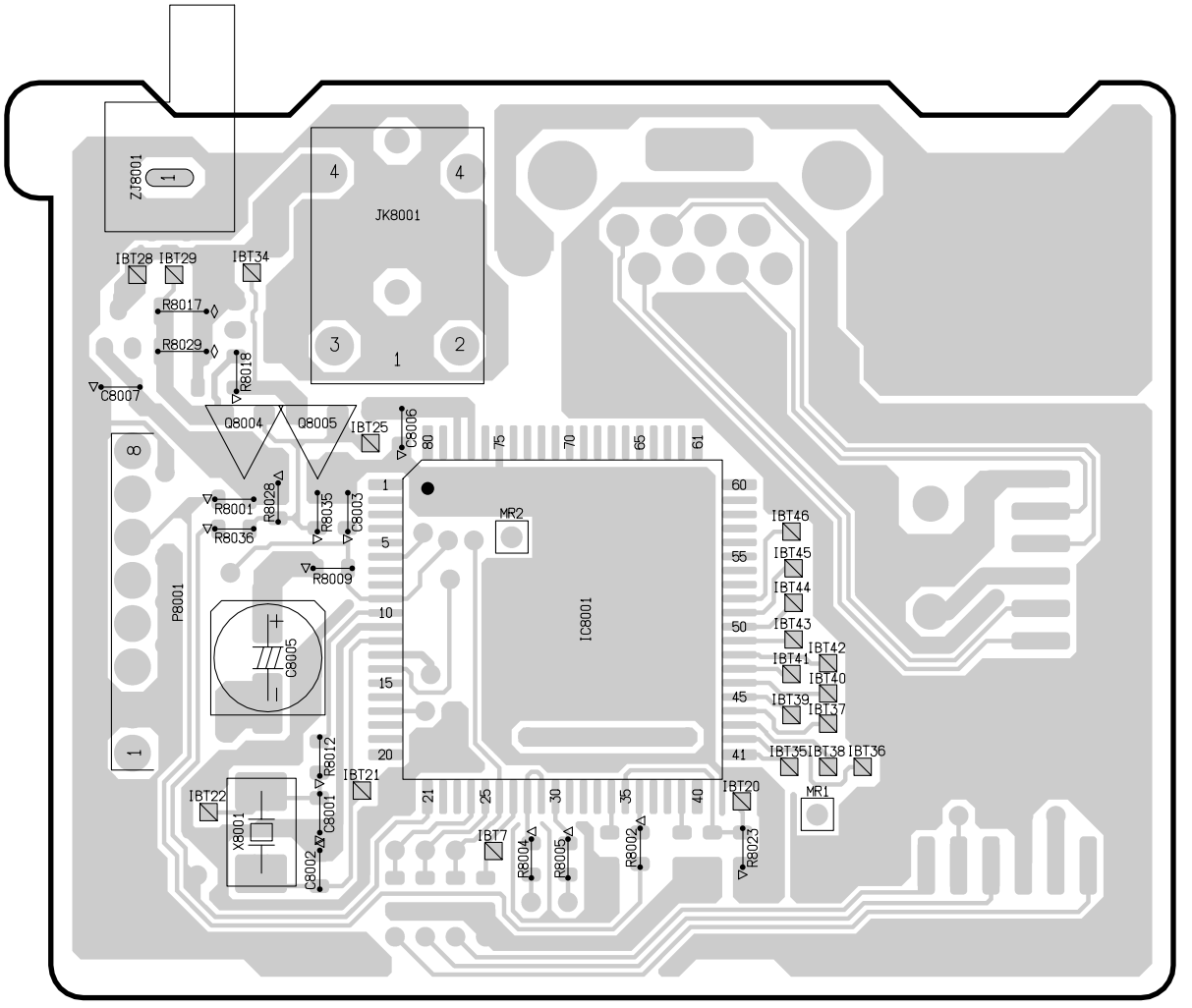

(FOIL SIDE)

DMR-E95HP
IR P.C.B. (Foil Side)
(REP3763A-1)

D
C
B
A

1 2 3 4 5

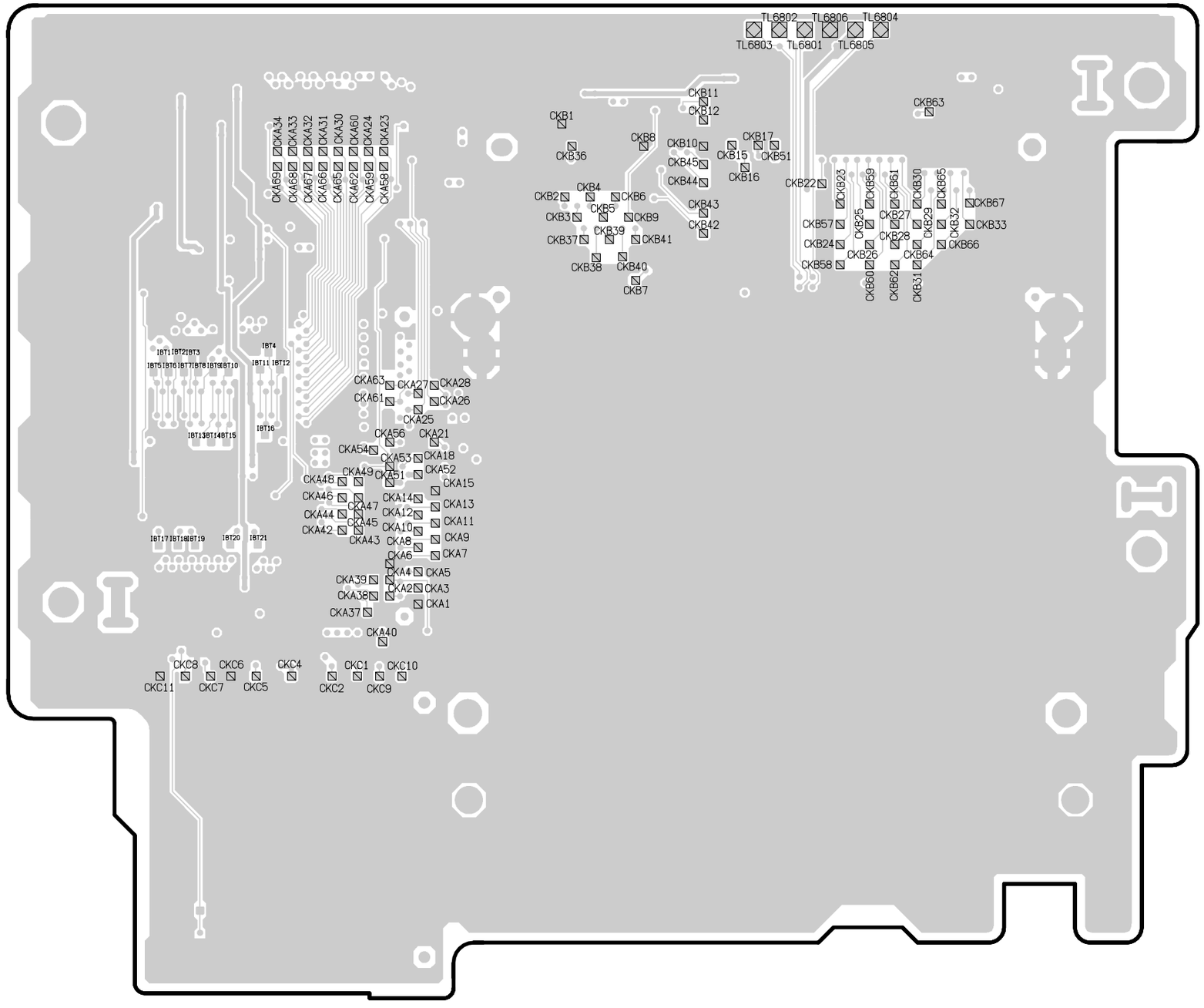
## IR P.C.B.




(COMPONENT SIDE)

DMR-E95HP
IR P.C.B. (Component Side)
(REP3763A-1)

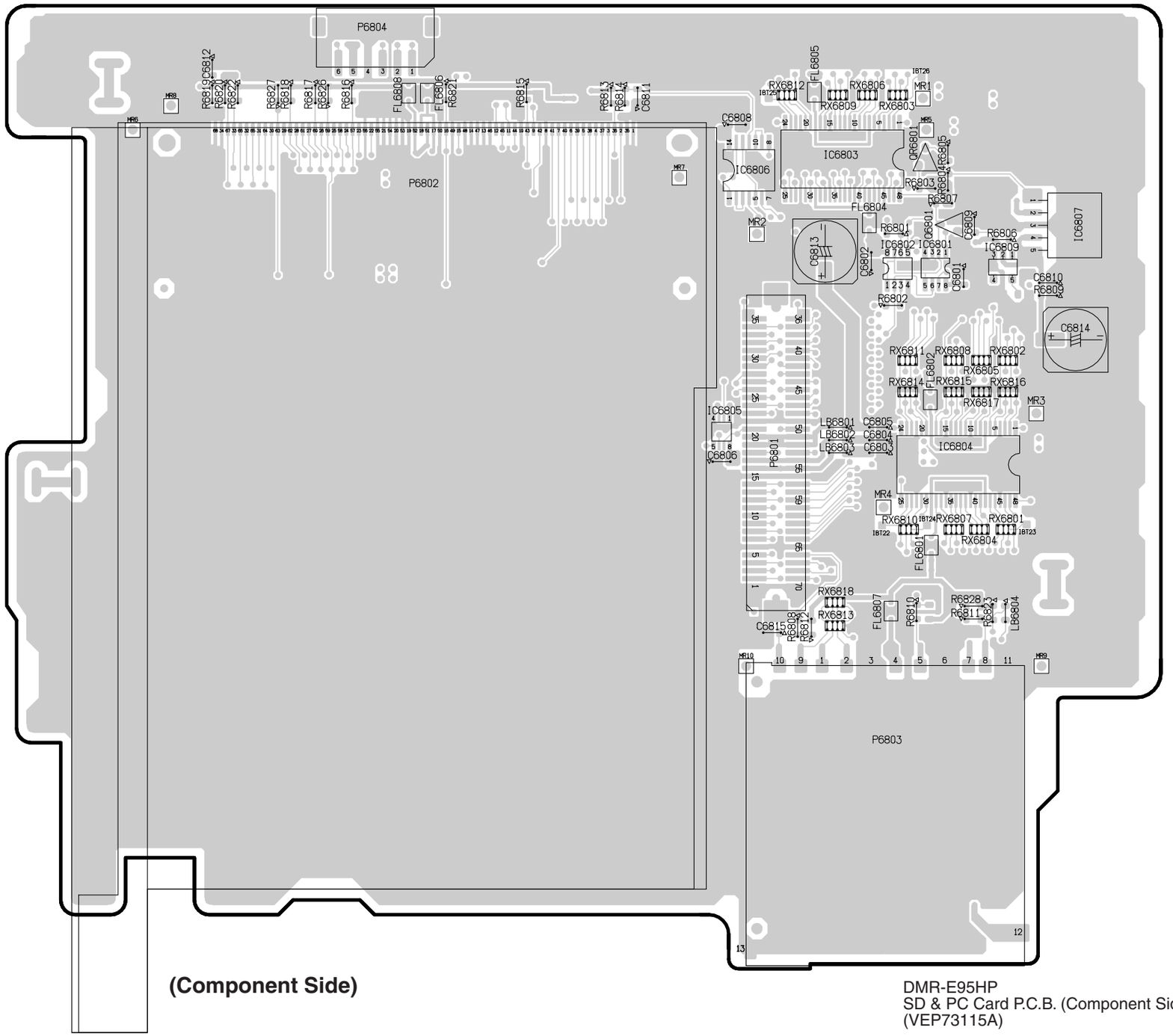
## SD & PC Card P.C.B.




**(Foil Side)**

DMR-E95HP
SD & PC Card P.C.B. (Foil Side)
(VEP73115A)

## SD & PC Card P.C.B.




DMR-E95HP
SD & PC Card P.C.B. (Component Side)
(VEP73115A)

## Digital P.C.B.

| Integrated Circuit | | |
|---|---|---|
| IC3401 | E-6 | C |
| IC3402 | D-6 | C |
| IC3404 | D-5 | C |
| IC3406 | E-2 | F |
| IC3408 | D-3 | C |
| IC3409 | E-1 | F |
| IC3501 | D-5 | F |
| IC3502 | D-2 | C |
| IC4404 | E-6 | F |
| IC4406 | E-6 | F |
| IC4407 | D-6 | F |
| IC4408 | E-7 | F |
| IC4409 | E-7 | F |
| IC6001 | C-3 | F |
| IC6002 | C-3 | F |
| IC6003 | C-6 | C |
| IC6004 | B-3 | F |
| IC6005 | C-6 | C |
| IC6006 | C-5 | C |
| IC6701 | B-3 | C |
| IC6703 | C-1 | C |
| IC37001 | B-6 | F |
| IC37003 | B-7 | F |
| IC37004 | C-7 | F |
| IC37005 | B-5 | F |
| IC50001 | E-4 | F |
| IC50002 | E-3 | F |
| IC50003 | D-2 | F |
| **Transistor** | | |
| Q6001 | D-4 | C |
| Q6002 | D-4 | C |
| Q6701 | C-2 | C |
| Q6702 | C-2 | C |
| Q6703 | C-2 | C |
| Q6704 | C-2 | C |
| Q6705 | C-2 | C |
| Q50001 | E-4 | C |
| Q50002 | E-4 | C |
| Q50003 | E-4 | C |
| Q50004 | E-4 | C |
| Q50005 | E-4 | C |
| **Transistor-resistor** | | |
| QR3502 | D-6 | F |
| QR3503 | D-6 | F |
| **Test Point** | | |
| CKA1 | C-2 | F |
| CKA2 | B-2 | F |
| CKA3 | B-2 | F |
| CKA4 | B-2 | F |
| CKA5 | B-3 | F |
| CKA7 | B-2 | F |
| CKA8 | B-3 | F |
| CKA9 | B-2 | F |
| CKA10 | B-3 | F |
| CKA11 | B-2 | F |
| CKA12 | B-3 | F |
| CKA13 | D-4 | F |
| CKA14 | D-4 | F |
| CKA18 | C-3 | F |
| CKA21 | C-2 | F |
| CKA23 | C-2 | F |
| CKA24 | C-3 | F |
| CKA25 | C-2 | F |
| CKA26 | C-3 | F |
| CKA27 | C-3 | F |
| CKA28 | C-2 | F |
| CKA30 | C-2 | F |
| CKA31 | D-2 | F |
| CKA32 | D-2 | F |
| CKA33 | D-2 | F |
| CKA34 | D-2 | F |
| CKA36 | E-1 | F |
| CKA37 | A-2 | F |
| CKA38 | A-2 | F |
| CKA39 | A-2 | F |
| CKA40 | A-2 | F |
| CKA42 | D-5 | F |
| CKA43 | D-5 | F |
| CKA44 | B-2 | F |
| CKA45 | B-2 | F |
| CKA46 | B-2 | F |
| CKA47 | B-2 | F |
| CKA48 | C-2 | F |

| | | |
|---|---|---|
| CKA49 | C-2 | F |
| CKA51 | C-2 | F |
| CKA52 | C-2 | F |
| CKA53 | C-2 | F |
| CKA54 | E-1 | F |
| CKA56 | C-2 | F |
| CKA58 | C-2 | F |
| CKA59 | C-2 | F |
| CKA60 | C-2 | F |
| CKA61 | C-2 | F |
| CKA62 | C-2 | F |
| CKA63 | C-2 | F |
| CKA65 | D-2 | F |
| CKA66 | D-2 | F |
| CKA67 | D-2 | F |
| CKA68 | D-2 | F |
| CKA69 | D-2 | F |
| CKA70 | B-1 | F |
| CKC19 | B-3 | F |
| CKC20 | C-3 | F |
| CKC22 | A-2 | F |
| CKC24 | B-3 | F |
| CKC25 | C-3 | F |
| CKC27 | A-2 | F |
| CKC29 | C-4 | F |
| CKC30 | B-3 | F |
| CKC32 | C-2 | F |
| CKC33 | D-4 | F |
| CKC35 | A-2 | F |
| CKC36 | B-4 | F |
| CKC37 | A-2 | F |
| CKC38 | A-2 | F |
| CKC39 | A-2 | F |
| CKC41 | B-4 | F |
| CKC42 | B-4 | F |
| CKC43 | B-4 | F |
| CKC44 | A-2 | F |
| CKC45 | A-2 | F |
| CKC46 | B-2 | F |
| CKC47 | B-4 | F |
| CKC48 | B-3 | F |
| CKC49 | B-4 | F |
| CKC51 | B-4 | F |
| CKC52 | B-4 | F |
| CKC53 | B-2 | F |
| CKC54 | B-2 | F |
| CKC55 | A-2 | F |
| CKC56 | A-2 | F |
| CKC57 | B-2 | F |
| CKC58 | B-2 | F |
| CKC59 | B-2 | F |
| CKC61 | B-2 | F |
| CKC62 | E-1 | F |
| CKC63 | B-2 | F |
| CKC64 | E-1 | F |
| CKC65 | E-1 | F |
| CKC66 | E-1 | F |
| CKC67 | F-1 | F |
| CKC68 | E-1 | F |
| CKC69 | E-1 | F |
| CKC88 | A-1 | F |
| CKC93 | C-1 | F |
| CKC94 | C-1 | F |
| CKC95 | C-1 | F |
| CKC96 | C-1 | F |
| CKC97 | C-1 | F |
| CKC98 | C-1 | F |
| CKC99 | C-1 | F |
| CKC100 | C-1 | F |
| CKC102 | C-1 | F |
| CKC103 | C-1 | F |
| CKC105 | C-1 | F |
| CKC106 | C-1 | F |
| CKC108 | D-1 | F |
| CKC109 | D-1 | F |
| CKC112 | D-1 | F |
| CKC113 | D-1 | F |
| CKC114 | E-1 | F |
| CKC115 | D-2 | F |
| CKC116 | E-1 | F |
| CKC117 | D-2 | F |
| CKC118 | E-1 | F |
| CKC119 | D-2 | F |
| CKC121 | D-2 | F |

| | | |
|---|---|---|
| CKF1 | C-6 | F |
| CKF3 | C-7 | F |
| CKF4 | C-7 | F |
| CKF5 | C-7 | F |
| CKF6 | C-7 | F |
| CKF8 | C-7 | F |
| CKF10 | C-7 | F |
| CKF12 | C-7 | F |
| CKF14 | D-6 | F |
| CKF16 | C-7 | F |
| CKF18 | C-7 | F |
| CKF20 | C-7 | F |
| CKF23 | D-7 | F |
| CKF24 | D-7 | F |
| CKF25 | D-7 | F |
| CKF26 | D-7 | F |
| CKF27 | D-7 | F |
| CKF28 | D-7 | F |
| CKF29 | D-7 | F |
| CKF30 | D-7 | F |
| CKF31 | D-7 | F |
| CKF32 | D-7 | F |
| CKF33 | D-7 | F |
| CKF34 | D-7 | F |
| CKF35 | D-7 | F |
| CKF36 | D-7 | F |
| CKF37 | E-7 | F |
| CKF38 | E-7 | F |
| CKF40 | D-6 | F |
| CKG3 | E-5 | F |
| CKG5 | E-5 | F |
| CKG7 | E-5 | F |
| CKG9 | E-5 | F |
| CKG11 | E-5 | F |
| CKG13 | E-5 | F |
| CKG14 | E-5 | F |
| CKH1 | B-2 | C |
| CKH2 | B-2 | C |
| CKH5 | B-2 | C |
| CKH6 | B-2 | C |
| CKJ1 | E-5 | C |
| CKJ2 | E-5 | C |
| CKJ5 | E-5 | C |
| CKJ6 | E-5 | C |
| CKJ9 | E-4 | C |
| CKJ10 | E-4 | C |
| CKJ13 | E-4 | C |
| CKJ15 | E-4 | C |
| CKJ18 | E-4 | C |
| CKJ19 | E-4 | C |
| CKJ21 | E-4 | C |
| CKJ22 | E-4 | C |
| CKJ23 | E-4 | C |
| CKJ25 | E-4 | C |
| CKJ26 | E-4 | C |
| CKJ27 | E-4 | C |
| CKJ29 | E-4 | C |
| CKJ30 | E-4 | C |
| CKJ31 | E-4 | C |
| CKJ33 | E-3 | C |
| CKJ34 | E-3 | C |
| CKJ35 | E-3 | C |
| CKJ37 | E-3 | C |
| CKJ38 | E-3 | C |
| CKJ39 | E-3 | C |
| CKJ41 | E-3 | C |
| CKJ42 | E-3 | C |

| | | |
|---|---|---|
| CL6746 | B-2 | C |
| CL6747 | B-2 | C |
| CL6748 | A-3 | C |
| CL6749 | A-3 | C |
| CL9006 | A-3 | C |
| CL9019 | A-3 | C |
| CL9022 | A-3 | C |
| CL9023 | A-3 | C |
| CL9024 | A-3 | C |
| CL9025 | A-3 | C |
| CL9028 | A-3 | C |
| CL9029 | A-4 | C |
| CL37001 | C-6 | F |
| CL37002 | C-6 | F |
| CL37003 | C-6 | F |
| CL37004 | C-6 | F |
| CL37005 | C-6 | F |
| CL37006 | C-6 | F |
| CL37007 | B-6 | F |
| CL37008 | B-6 | F |
| CL37009 | B-6 | F |
| CL3401 | E-6 | C |
| CL37010 | B-6 | F |
| CL3402 | E-5 | C |
| CL37011 | C-6 | F |
| CL3403 | F-6 | C |
| CL37012 | C-6 | F |
| CL3404 | F-6 | C |
| CL37013 | C-6 | F |
| CL3405 | F-6 | C |
| CL50001 | D-3 | F |
| CL3406 | F-6 | C |
| CL50005 | B-3 | F |
| CL3407 | E-6 | C |
| CL50006 | B-3 | F |
| CL3408 | E-5 | C |
| CL50007 | B-4 | F |
| CL3409 | E-5 | C |
| CL50008 | D-3 | F |
| CL3410 | F-6 | C |
| CL50009 | D-3 | F |
| CL3426 | D-5 | C |
| TL6001 | A-5 | F |
| CL3427 | D-5 | C |
| TL6002 | A-5 | F |
| CL3428 | E-5 | C |
| TL6003 | A-5 | F |
| CL3429 | D-4 | C |
| TL6004 | B-6 | F |
| CL3430 | D-5 | C |
| TL6005 | B-6 | F |
| CL3431 | D-5 | C |
| TL6006 | B-6 | F |
| CL3432 | D-5 | C |
| **Connector** | | |
| CL6001 | B-3 | F |
| FP3501 | D-7 | F |
| CL6002 | D-3 | F |
| P3501 | C-2 | F |
| CL6003 | B-4 | F |
| P6002 | B-4 | F |
| CL6004 | D-3 | F |
| P9001 | E-3 | C |
| CL6005 | D-3 | F |
| PS37001 | A-2 | C |
| **Diode** | | |
| CL6006 | D-3 | F |
| D3401 | E-5 | C |
| CL6007 | D-3 | F |
| D3402 | E-6 | C |
| CL6701 | A-2 | C |
| D4401 | E-7 | F |
| CL6702 | B-4 | C |
| **Crystal Osillator** | | |
| CL6703 | B-4 | C |
| X3401 | E-2 | F |
| CL6704 | B-4 | C |
| X3501 | D-5 | F |
| CL6705 | B-4 | C |
| X37001 | C-7 | F |
| CL6706 | C-3 | C |
| **Coil** | | |
| CL6707 | C-3 | C |
| LB3404 | D-7 | C |
| CL6708 | C-3 | C |
| LB3405 | C-6 | C |
| CL6709 | C-3 | C |
| LB3408 | C-3 | C |
| CL6710 | C-4 | C |
| LB3409 | D-3 | C |
| CL6711 | A-3 | C |
| LB3501 | E-1 | F |
| CL6712 | C-3 | C |
| LB3502 | A-2 | F |
| CL6713 | C-4 | C |
| LB3503 | C-2 | F |
| CL6714 | C-3 | C |
| LB37001 | C-2 | C |
| CL6715 | C-4 | C |
| LB4401 | E-7 | F |
| CL6717 | B-4 | C |
| LB4402 | E-6 | F |
| CL6718 | A-3 | C |
| LB4403 | E-7 | F |
| CL6719 | A-3 | C |
| LB4404 | D-5 | F |
| CL6720 | A-3 | C |
| LB4405 | E-6 | F |
| CL6721 | A-3 | C |
| LB6001 | C-5 | C |
| CL6722 | B-2 | C |
| LB6002 | B-6 | C |
| CL6723 | B-3 | C |
| LB6003 | C-4 | C |
| CL6724 | B-2 | C |
| LB6004 | C-5 | C |
| CL6725 | B-3 | C |
| LB9001 | E-4 | C |
| CL6726 | B-3 | C |
| LB9002 | E-4 | C |
| CL6727 | B-2 | C |
| LB9006 | E-3 | C |
| CL6728 | B-2 | C |
| LB9007 | E-2 | C |
| CL6729 | B-2 | C |
| LB9008 | F-2 | C |
| CL6730 | B-2 | C |
| LB9009 | F-2 | C |
| CL6731 | B-2 | C |
| LB50001 | F-5 | C |
| CL6732 | B-1 | C |
| LB50002 | E-4 | F |
| CL6733 | B-2 | C |
| LB50003 | D-3 | F |
| CL6734 | B-2 | C |
| LB50004 | D-3 | F |
| CL6735 | B-2 | C |
| LB50005 | E-2 | F |
| CL6736 | B-2 | C |
| **Filter** | | |
| CL6737 | B-2 | C |
| FL3401 | F-5 | C |
| CL6738 | B-2 | C |
| FL3402 | E-6 | C |
| CL6744 | B-2 | C |
| FL3404 | E-5 | C |
| CL6745 | B-2 | C |

| | | |
|---|---|---|
| FL3406 | E-6 | C |
| FL3407 | E-6 | C |
| FL3409 | E-7 | C |
| FL3410 | D-7 | C |
| FL3411 | C-6 | C |
| FL3412 | E-2 | F |
| FL3414 | D-5 | C |
| FL3415 | D-5 | C |
| FL3416 | D-5 | C |
| FL3417 | C-5 | C |
| FL3418 | D-4 | C |
| FL3419 | C-5 | C |
| FL3420 | D-4 | C |
| FL3421 | D-6 | C |
| FL3422 | E-5 | C |
| FL3423 | E-5 | C |
| FL3424 | D-4 | C |
| FL3425 | D-4 | C |
| FL3426 | D-5 | C |
| FL3429 | E-2 | F |
| FL3431 | E-2 | F |
| FL3433 | E-1 | F |
| FL3434 | C-3 | C |
| FL3435 | D-3 | C |
| FL3501 | E-1 | C |
| FL3502 | C-1 | C |
| FL3505 | C-5 | F |
| FL3506 | C-5 | F |
| FL3507 | D-5 | F |
| FL3508 | C-6 | F |
| FL3509 | D-6 | F |
| FL3510 | D-5 | F |
| FL3511 | D-5 | F |
| FL3512 | D-6 | F |
| FL3513 | D-6 | F |
| FL3514 | C-5 | F |
| FL3515 | C-6 | F |
| FL3516 | D-6 | F |
| FL4403 | E-7 | F |
| FL4404 | E-6 | F |
| FL4405 | D-5 | F |
| FL6001 | C-6 | C |
| FL6002 | B-3 | F |
| FL6003 | D-3 | F |
| FL6004 | D-4 | F |
| FL6005 | D-4 | F |
| FL6006 | C-4 | F |
| FL6007 | C-4 | C |
| FL6008 | D-4 | F |
| FL6009 | C-4 | F |
| FL6010 | C-4 | F |
| FL6011 | C-4 | F |
| FL6012 | D-4 | F |
| FL6013 | C-4 | F |
| FL6014 | D-4 | F |
| FL6015 | C-4 | F |
| FL6016 | D-4 | F |
| FL6017 | B-4 | F |
| FL6018 | C-5 | C |
| FL6020 | B-4 | F |
| FL6021 | D-3 | F |
| FL6022 | B-5 | C |
| FL6023 | B-6 | C |
| FL6701 | B-4 | C |
| FL6702 | C-4 | C |
| FL6703 | C-1 | C |
| FL37001 | B-6 | F |
| FL37002 | C-7 | F |
| FL37003 | B-6 | F |
| FL37004 | B-6 | F |
| FL37005 | B-7 | F |
| FL37006 | B-6 | F |
| FL37007 | A-5 | F |
| FL37008 | C-1 | C |
| FL37010 | B-6 | F |
| FL37011 | B-7 | F |
| FL37012 | C-2 | C |
| FL37013 | A-5 | F |
| FL50001 | E-4 | F |
| FL50002 | D-3 | F |
| FL50003 | D-3 | F |
| FL50004 | E-2 | F |
| FL50005 | C-3 | F |
| FL50006 | C-3 | F |

| Transformer | | |
|---|---|---|
| T37001 | B-7 | F |
| **Capacitor** | | |
| C3401 | E-2 | F |
| C3402 | E-6 | C |
| C3403 | F-6 | C |
| C3404 | E-5 | C |
| C3405 | E-5 | C |
| C3406 | F-6 | C |
| C3407 | E-2 | F |
| C3408 | E-2 | F |
| C3410 | F-6 | C |
| C3411 | E-6 | C |
| C3412 | F-5 | C |
| C3413 | F-5 | C |
| C3414 | E-5 | C |
| C3415 | E-5 | C |
| C3416 | F-6 | C |
| C3417 | E-5 | C |
| C3418 | F-5 | C |
| C3419 | E-5 | C |
| C3420 | E-5 | C |
| C3421 | E-5 | C |
| C3422 | E-5 | C |
| C3423 | E-5 | C |
| C3424 | E-5 | C |
| C3425 | E-5 | C |
| C3426 | E-5 | C |
| C3427 | E-5 | C |
| C3428 | E-5 | C |
| C3429 | E-7 | C |
| C3430 | E-6 | C |
| C3431 | E-6 | C |
| C3432 | E-6 | C |
| C3433 | E-6 | C |
| C3435 | E-6 | C |
| C3436 | E-6 | C |
| C3440 | E-7 | C |
| C3441 | E-2 | F |
| C3502 | C-7 | F |
| C4411 | E-6 | F |
| C4412 | E-2 | C |
| C4413 | E-1 | C |
| C4414 | E-6 | F |
| C4415 | E-5 | F |
| C4416 | D-4 | C |
| C4417 | E-6 | F |
| C4418 | D-3 | C |
| C4421 | E-3 | C |
| C4422 | E-1 | C |
| C4423 | D-3 | C |
| C4424 | F-4 | F |
| C4425 | F-6 | F |
| C4426 | E-5 | F |
| C4427 | E-2 | C |
| C4428 | E-6 | F |
| C4429 | E-6 | F |
| C4430 | E-6 | F |
| C4431 | E-6 | F |
| C4432 | E-7 | F |
| C4433 | E-1 | C |
| C4434 | E-7 | F |
| C6001 | D-3 | F |
| C6002 | D-4 | F |
| C6003 | C-3 | F |
| C9001 | E-4 | C |
| C9002 | E-4 | C |
| C37002 | B-7 | F |
| C37003 | C-7 | F |
| C37004 | C-6 | F |
| C37005 | B-6 | F |
| C37006 | B-7 | F |
| C37007 | B-7 | F |
| C37008 | B-7 | F |
| C37009 | C-2 | C |
| C50001 | C-3 | F |
| C50002 | C-5 | C |
| C50003 | D-2 | F |
| C50004 | C-5 | C |
| C50005 | F-5 | C |
| **Resistor** | | |
| R3405 | E-5 | C |
| R3407 | E-5 | C |
| R3409 | E-6 | C |
| R3410 | E-6 | C |
| R3411 | E-6 | C |
| R3412 | E-6 | C |
| R3414 | E-2 | F |
| R3416 | E-6 | C |

| | | |
|---|---|---|
| R3417 | E-6 | C |
| R3418 | E-6 | C |
| R3419 | D-5 | C |
| R3420 | D-5 | C |
| R3421 | D-5 | C |
| R3422 | E-5 | C |
| R3423 | E-5 | C |
| R3427 | E-5 | C |
| R3430 | D-5 | C |
| R3432 | E-5 | C |
| R3433 | D-4 | C |
| R3434 | E-5 | C |
| R3435 | D-2 | F |
| R3436 | E-2 | F |
| R3440 | D-4 | C |
| R3442 | D-4 | C |
| R3443 | D-4 | C |
| R3444 | D-4 | C |
| R3445 | D-2 | F |
| R3446 | E-2 | F |
| R3447 | E-2 | F |
| R3448 | E-2 | F |
| R3449 | E-2 | F |
| R3450 | E-2 | F |
| R3451 | E-2 | F |
| R3452 | D-2 | F |
| R3453 | D-2 | F |
| R3454 | E-2 | F |
| R3455 | D-2 | F |
| R3456 | D-2 | F |
| R3457 | E-2 | F |
| R3458 | D-2 | F |
| R3459 | D-2 | F |
| R3460 | D-2 | F |
| R3461 | E-2 | F |
| R3462 | E-2 | F |
| R3463 | D-5 | C |
| R3464 | C-5 | C |
| R3472 | D-4 | C |
| R3473 | D-5 | C |
| R3476 | E-5 | C |
| R3501 | C-5 | F |
| R3502 | C-5 | F |
| R3503 | C-5 | F |
| R3504 | C-5 | F |
| R3506 | C-5 | F |
| R3507 | C-5 | F |
| R3508 | C-5 | F |
| R3509 | C-5 | F |
| R3510 | D-5 | F |
| R3511 | D-5 | F |
| R3513 | D-5 | F |
| R3514 | D-5 | F |
| R3515 | D-5 | F |
| R3516 | D-5 | F |
| R3517 | D-5 | F |
| R3519 | D-6 | F |
| R3520 | D-6 | F |
| R3521 | D-6 | F |
| R3522 | D-6 | F |
| R3523 | D-6 | F |
| R3524 | D-6 | F |
| R3525 | D-6 | F |
| R3526 | C-6 | F |
| R3527 | C-6 | F |
| R3528 | C-6 | F |
| R3529 | C-6 | F |
| R3530 | D-6 | F |
| R3531 | C-7 | F |
| R3532 | D-6 | F |
| R3533 | C-7 | F |
| R3535 | C-7 | F |
| R3536 | C-7 | F |
| R3537 | C-7 | F |
| R3540 | D-5 | F |
| R3541 | D-6 | F |
| R3542 | D-6 | F |
| R3543 | D-7 | F |
| R3548 | D-6 | F |
| R4418 | E-7 | F |
| R4419 | E-7 | F |
| R4420 | E-7 | F |
| R4421 | E-7 | F |
| R4422 | E-6 | F |
| R4423 | E-7 | F |

| | | |
|---|---|---|
| R4424 | E-6 | C |
| R4425 | E-6 | F |
| R4426 | F-2 | C |
| R4427 | F-2 | C |
| R4428 | E-6 | F |
| R4433 | E-5 | F |
| R4434 | E-6 | F |
| R4435 | E-6 | F |
| R4436 | E-6 | F |
| R4437 | E-6 | F |
| R4438 | D-6 | F |
| R4439 | D-6 | F |
| R4450 | E-7 | F |
| R4451 | E-7 | F |
| R4452 | E-6 | F |
| R4453 | E-7 | F |
| R4454 | D-6 | F |
| R4455 | D-6 | F |
| R4456 | E-6 | F |
| R4457 | E-7 | F |
| R6001 | B-1 | F |
| R6002 | C-3 | F |
| R6003 | C-4 | F |
| R6004 | E-4 | C |
| R6005 | D-4 | C |
| R6006 | D-4 | C |
| R6007 | D-4 | C |
| R6008 | C-6 | C |
| R6009 | C-4 | F |
| R6010 | C-4 | F |
| R6011 | C-4 | C |
| R6013 | B-4 | F |
| R6014 | A-5 | F |
| R6015 | A-5 | F |
| R6016 | A-5 | F |
| R6017 | B-4 | F |
| R6018 | B-3 | F |
| R6019 | B-3 | F |
| R6020 | B-3 | F |
| R6021 | B-3 | F |
| R6022 | B-3 | F |
| R6023 | B-3 | F |
| R6024 | D-3 | F |
| R6028 | D-3 | F |
| R6029 | C-3 | F |
| R6031 | D-3 | F |
| R6035 | D-3 | F |
| R6036 | D-3 | F |
| R6037 | D-3 | F |
| R6039 | D-3 | F |
| R6040 | C-5 | C |
| R6701 | A-2 | C |
| R6703 | B-1 | C |
| R6706 | B-3 | C |
| R6707 | B-3 | C |
| R6709 | A-3 | C |
| R6710 | A-3 | C |
| R6711 | B-4 | C |
| R6712 | B-4 | C |
| R6713 | B-4 | C |
| R6714 | B-4 | C |
| R6715 | B-4 | C |
| R6716 | C-3 | C |
| R6717 | C-3 | C |
| R6718 | B-3 | C |
| R6720 | B-3 | C |
| R6721 | B-3 | C |
| R6722 | B-2 | C |
| R6723 | B-2 | C |
| R6724 | B-3 | C |
| R6725 | B-3 | C |
| R6726 | B-3 | C |
| R6727 | C-3 | C |
| R6728 | B-3 | C |
| R6729 | C-2 | C |
| R6730 | C-2 | C |
| R6731 | C-2 | C |
| R6733 | C-2 | C |
| R6735 | C-2 | C |
| R6737 | B-1 | C |
| R6738 | B-2 | C |
| R6739 | B-1 | C |
| R6750 | D-3 | F |
| R6751 | E-4 | C |

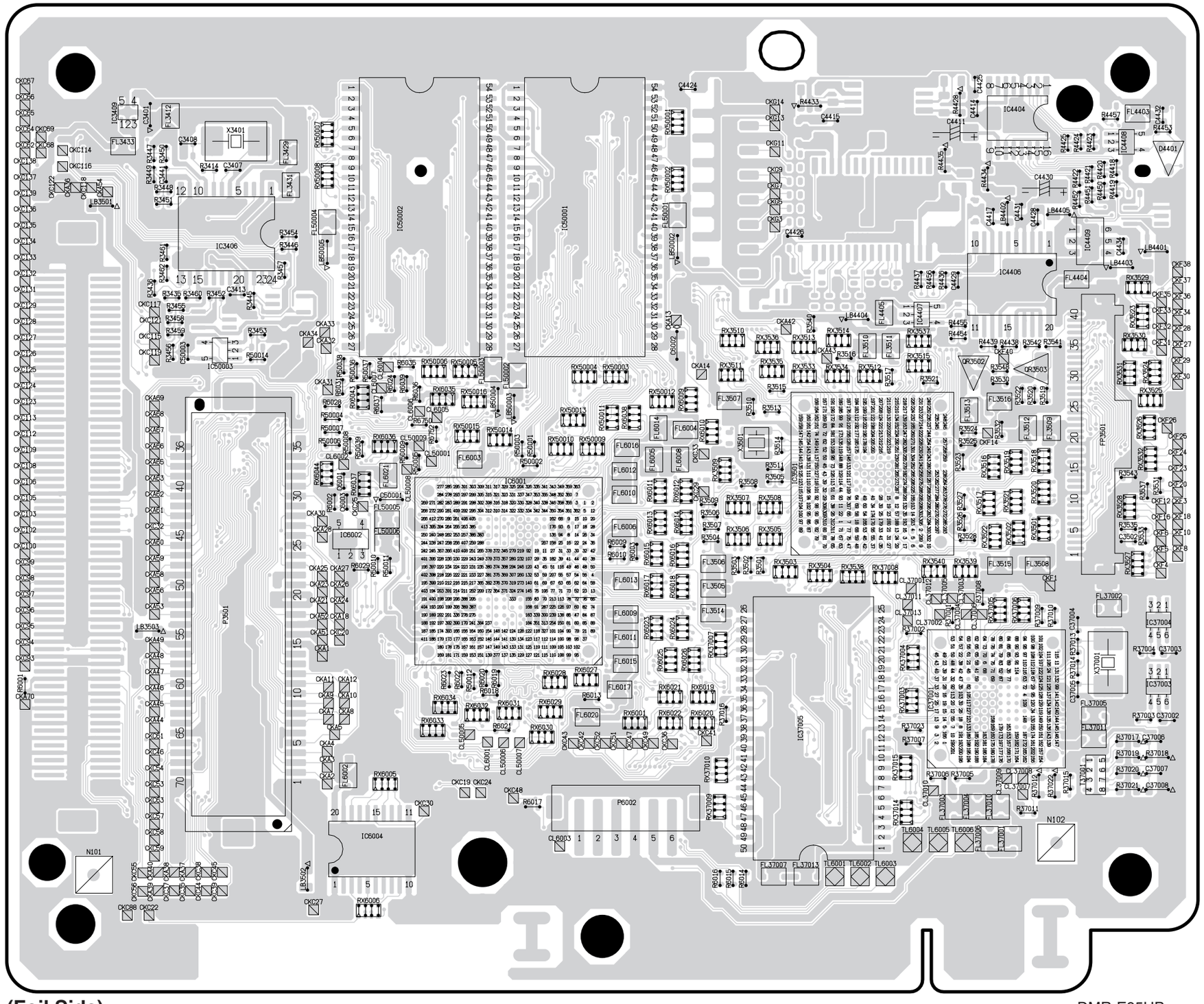
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|---|---|---|
| R6752 | D-3 | F |
| R6753 | C-2 | C |
| R6754 | C-3 | C |
| R6755 | E-3 | C |
| R6756 | E-3 | C |
| R37001 | C-6 | F |
| R37002 | C-6 | F |
| R37003 | B-7 | F |
| R37004 | C-7 | F |
| R37005 | B-6 | F |
| R37006 | B-6 | F |
| R37007 | B-6 | F |
| R37008 | C-6 | F |
| R37009 | C-6 | F |
| R37010 | C-6 | F |
| R37011 | B-6 | F |
| R37012 | B-6 | F |
| R37013 | C-6 | F |
| R37014 | B-6 | F |
| R37015 | B-6 | F |
| R37016 | B-5 | F |
| R37017 | B-7 | F |
| R37018 | B-7 | F |
| R37019 | B-7 | F |
| R37020 | B-7 | F |
| R37021 | B-7 | F |
| R37022 | B-6 | F |
| R37023 | B-6 | F |
| R50001 | D-4 | F |
| R50002 | D-4 | F |
| R50003 | D-4 | F |
| R50004 | D-3 | F |
| R50005 | D-3 | F |
| R50006 | D-3 | F |
| R50007 | D-3 | F |
| R50008 | D-3 | F |
| R50009 | D-3 | F |
| R50010 | C-3 | F |
| R50011 | C-3 | F |
| R50012 | B-3 | F |
| R50014 | D-2 | F |
| R50015 | C-5 | C |
| R50016 | C-5 | C |
| R50017 | C-5 | C |
| R50018 | F-4 | C |
| R50019 | F-4 | C |
| R50020 | F-4 | C |
| R50021 | F-4 | C |
| R50022 | F-4 | C |
| R50023 | F-4 | C |
| R50024 | F-4 | C |
| R50025 | F-4 | C |
| R50026 | F-3 | C |
| R50027 | F-4 | C |
| R50028 | F-4 | C |
| R50029 | F-4 | C |
| R50030 | E-4 | C |
| R50031 | E-4 | C |
| R50032 | F-4 | C |
| R50033 | F-4 | C |
| R50034 | F-4 | C |
| R50035 | F-4 | C |
| R50036 | D-3 | F |
| R50037 | D-3 | F |
| R50038 | D-3 | F |
| R50039 | D-3 | F |
| RX3401 | E-6 | C |
| RX3402 | E-6 | C |
| RX3403 | E-6 | C |
| RX3404 | D-7 | C |
| RX3405 | D-6 | C |
| RX3406 | C-7 | C |
| RX3407 | C-7 | C |
| RX3409 | E-6 | C |
| RX3410 | E-5 | C |
| RX3411 | E-5 | C |
| RX3412 | D-6 | C |
| RX3413 | C-6 | C |
| RX3414 | C-6 | C |
| RX3415 | D-6 | C |
| RX3416 | D-6 | C |
| RX3421 | D-4 | C |
| RX3422 | E-4 | C |
| RX3433 | C-3 | C |

| | | |
|---|---|---|
| RX3434 | C-3 | C |
| RX3435 | C-3 | C |
| RX3436 | C-4 | C |
| RX3437 | C-4 | C |
| RX3438 | C-4 | C |
| RX3439 | D-3 | C |
| RX3440 | D-3 | C |
| RX3441 | D-3 | C |
| RX3442 | D-4 | C |
| RX3443 | D-4 | C |
| RX3444 | D-4 | C |
| RX3501 | C-6 | F |
| RX3502 | C-6 | F |
| RX3503 | C-5 | F |
| RX3504 | C-5 | F |
| RX3505 | C-5 | F |
| RX3506 | C-5 | F |
| RX3507 | C-5 | F |
| RX3508 | C-5 | F |
| RX3509 | D-5 | F |
| RX3510 | D-5 | F |
| RX3511 | D-5 | F |
| RX3512 | D-5 | F |
| RX3513 | D-5 | F |
| RX3514 | D-5 | F |
| RX3515 | D-6 | F |
| RX3516 | D-6 | F |
| RX3517 | C-6 | F |
| RX3518 | D-6 | F |
| RX3519 | D-6 | F |
| RX3520 | C-6 | F |
| RX3521 | D-5 | F |
| RX3522 | D-6 | F |
| RX3523 | D-6 | F |
| RX3524 | D-7 | F |
| RX3525 | D-7 | F |
| RX3526 | D-7 | F |
| RX3527 | C-7 | F |
| RX3528 | C-7 | F |
| RX3529 | E-7 | F |
| RX3530 | D-7 | F |
| RX3531 | D-7 | F |
| RX3532 | D-7 | F |
| RX3533 | D-5 | F |
| RX3534 | D-5 | F |
| RX3535 | D-5 | F |
| RX3536 | D-5 | F |
| RX3537 | D-6 | F |
| RX3538 | C-5 | F |
| RX3539 | C-6 | F |
| RX3540 | C-6 | F |
| RX3541 | C-5 | C |
| RX3542 | C-5 | C |
| RX3543 | D-5 | F |
| RX3548 | D-5 | F |
| RX6001 | B-4 | F |
| RX6002 | B-4 | C |
| RX6003 | C-4 | C |
| RX6004 | B-5 | C |
| RX6005 | B-3 | F |
| RX6006 | A-3 | F |
| RX6007 | C-5 | C |
| RX6009 | D-4 | F |
| RX6010 | D-5 | F |
| RX6011 | C-4 | F |
| RX6012 | C-4 | F |
| RX6013 | C-4 | F |
| RX6014 | C-4 | F |
| RX6015 | C-4 | F |
| RX6016 | C-4 | F |
| RX6017 | C-4 | F |
| RX6018 | C-4 | F |
| RX6019 | B-4 | F |
| RX6020 | B-4 | F |
| RX6021 | B-4 | F |
| RX6022 | B-4 | F |
| RX6023 | C-4 | F |
| RX6024 | C-4 | F |
| RX6025 | C-4 | F |
| RX6026 | C-4 | F |
| RX6027 | B-4 | F |
| RX6028 | B-4 | F |
| RX6029 | B-4 | F |
| RX6030 | B-4 | F |
| RX6031 | B-3 | F |
| RX6032 | B-3 | F |
| RX6033 | B-3 | F |
| RX6034 | B-3 | F |

| | | |
|---|---|---|
| RX6035 | D-3 | F |
| RX6036 | D-3 | F |
| RX6037 | C-3 | F |
| RX6038 | D-4 | F |
| RX6039 | B-5 | C |
| RX6040 | B-5 | C |
| RX6041 | B-6 | C |
| RX6042 | B-6 | C |
| RX6043 | D-3 | F |
| RX6044 | D-2 | F |
| RX6701 | B-3 | C |
| RX6702 | A-3 | C |
| RX6703 | C-3 | C |
| RX6704 | B-3 | C |
| RX6705 | A-3 | C |
| RX6706 | B-3 | C |
| RX6708 | B-4 | C |
| RX6711 | B-3 | C |
| RX6712 | A-4 | C |
| RX6713 | B-4 | C |
| RX6714 | B-4 | C |
| RX6715 | C-3 | C |
| RX6716 | B-4 | C |
| RX6717 | B-4 | C |
| RX6718 | B-4 | C |
| RX6719 | C-4 | C |
| RX6720 | C-3 | C |
| RX6721 | C-3 | C |
| RX6722 | C-3 | C |
| RX6723 | C-3 | C |
| RX6724 | C-3 | C |
| RX6726 | C-4 | C |
| RX6727 | C-4 | C |
| RX6728 | B-4 | C |
| RX6729 | B-2 | C |
| RX6730 | B-2 | C |
| RX6731 | B-2 | C |
| RX6732 | B-2 | C |
| RX6733 | B-2 | C |
| RX6734 | C-3 | C |
| RX6735 | C-3 | C |
| RX6736 | B-2 | C |
| RX6737 | B-2 | C |
| RX6738 | C-4 | C |
| RX37003 | B-6 | F |
| RX37004 | C-6 | F |
| RX37005 | C-6 | F |
| RX37006 | C-6 | F |
| RX37007 | C-5 | F |
| RX37008 | C-5 | F |
| RX37009 | B-5 | F |
| RX37010 | B-5 | F |
| RX37014 | B-6 | F |
| RX37015 | B-6 | F |
| RX50001 | E-4 | F |
| RX50002 | E-4 | F |
| RX50003 | D-4 | F |
| RX50004 | D-4 | F |
| RX50005 | D-3 | F |
| RX50006 | D-3 | F |
| RX50007 | E-2 | F |
| RX50008 | E-2 | F |
| RX50009 | D-4 | F |
| RX50010 | D-4 | F |
| RX50011 | D-4 | F |
| RX50012 | D-4 | F |
| RX50013 | D-4 | F |
| RX50014 | D-3 | F |
| RX50015 | D-3 | F |
| RX50016 | D-3 | F |

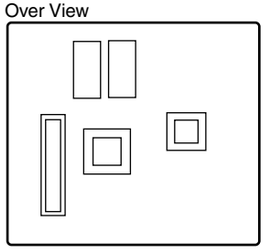
ADDRESS INFORMATION
C……COMPONENT SIDE
F……FOIL SIDE

## Digital P.C.B.



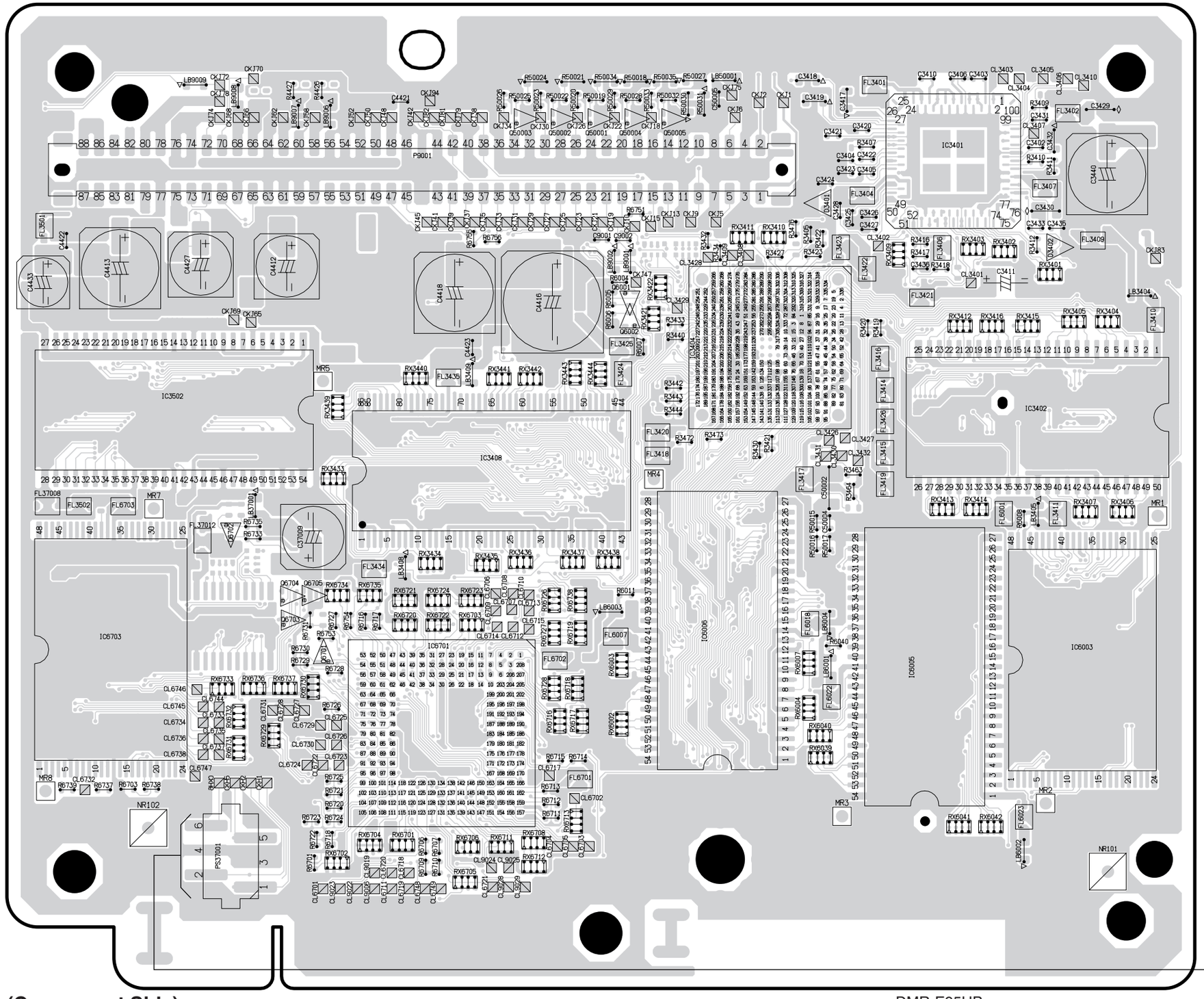
(Foil Side)

Over View



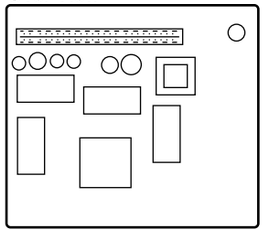
DMR-E95HP
Digital P.C.B. (Foil Side)
(RFKBE95HP)

## Digital P.C.B.

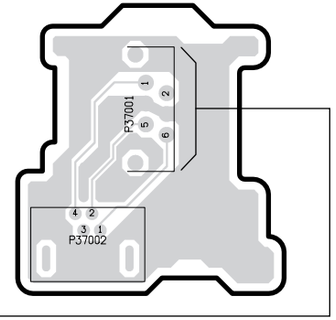



(Component Side)

Over View



DV Jack P.C.B.




DMR-E95HP
DV Jack P.C.B. (VEP73116A)
Digital P.C.B. (Component Side) (RFKBE95HP)

# MAIN P.C.B.

| Integrated Circuit | |
|---|---|
| IC1502 | E-7 |
| IC1505 | C-2 |
| IC1506 | B-6 |
| IC1507 | C-2 |
| IC1508 | B-5 |
| IC1509 | C-5 |
| IC1510 | C-5 |
| IC3001 | E-6 |
| IC4001 | E-4 |
| IC4004 | D-5 |
| IC4005 | E-2 |
| IC4901 | F-5 |
| IC7404 | B-8 |
| IC7501 | C-3 |
| IC7502 | A-3 |
| IC7503 | C-2 |
| IC7505 | C-2 |
| IC7506 | E-1 |

| Transistor | |
|---|---|
| Q4001 | E-2 |
| Q4002 | F-2 |
| Q4003 | E-2 |
| Q4004 | F-3 |
| Q4005 | E-2 |
| Q7401 | D-8 |
| Q7503 | A-2 |
| Q7504 | B-2 |
| Q7507 | A-7 |
| Q7508 | A-6 |
| Q7512 | E-1 |
| Q7517 | A-2 |
| Q7520 | A-6 |

| Transistor-resistor | |
|---|---|
| QR4001 | D-2 |
| QR4002 | D-2 |
| QR4003 | D-2 |
| QR4004 | D-2 |
| QR7502 | C-2 |
| QR7507 | A-2 |

| Test Point | |
|---|---|
| CL3001 | D-6 |
| CL7406 | C-6 |
| CL7407 | C-6 |
| CL7501 | C-4 |
| CL7502 | C-4 |
| TL7401 | E-8 |
| TL7501 | A-4 |
| TL7502 | A-2 |
| TL7503 | B-4 |
| TL7504 | C-4 |
| TL7505 | C-2 |
| TL7506 | B-4 |
| TL7507 | D-7 |
| TL7508 | C-3 |
| TL7509 | C-3 |
| TL7510 | C-3 |
| TL7511 | C-3 |
| TL7512 | C-4 |
| TL7513 | A-4 |
| TL7514 | A-4 |
| TL7515 | B-4 |
| TL7516 | B-4 |
| TW7501 | B-1 |

| Connector | |
|---|---|
| JK3901 | F-5 |
| JK3902 | F-3 |
| JK3903 | F-4 |
| JK3904 | A-7 |

| Integrated Circuit | |
|---|---|
| P1501 | C-2 |
| P1502 | C-1 |
| P7402 | B-6 |
| P7503 | E-1 |
| P7504 | A-1 |
| PP7401 | F-2 |

| Diode | |
|---|---|
| D1501 | B-2 |
| D4001 | E-2 |
| D4002 | E-2 |
| D7401 | E-8 |
| D7501 | B-2 |
| D7502 | B-2 |
| D7503 | B-2 |
| D7504 | B-2 |
| D7505 | B-2 |
| D7506 | B-2 |
| D7507 | C-2 |
| D7511 | C-2 |
| D7512 | A-5 |

| Crystal Osillator | |
|---|---|
| X7501 | B-4 |
| X7502 | B-4 |

| IC Protector | |
|---|---|
| IP7501 | B-2 |

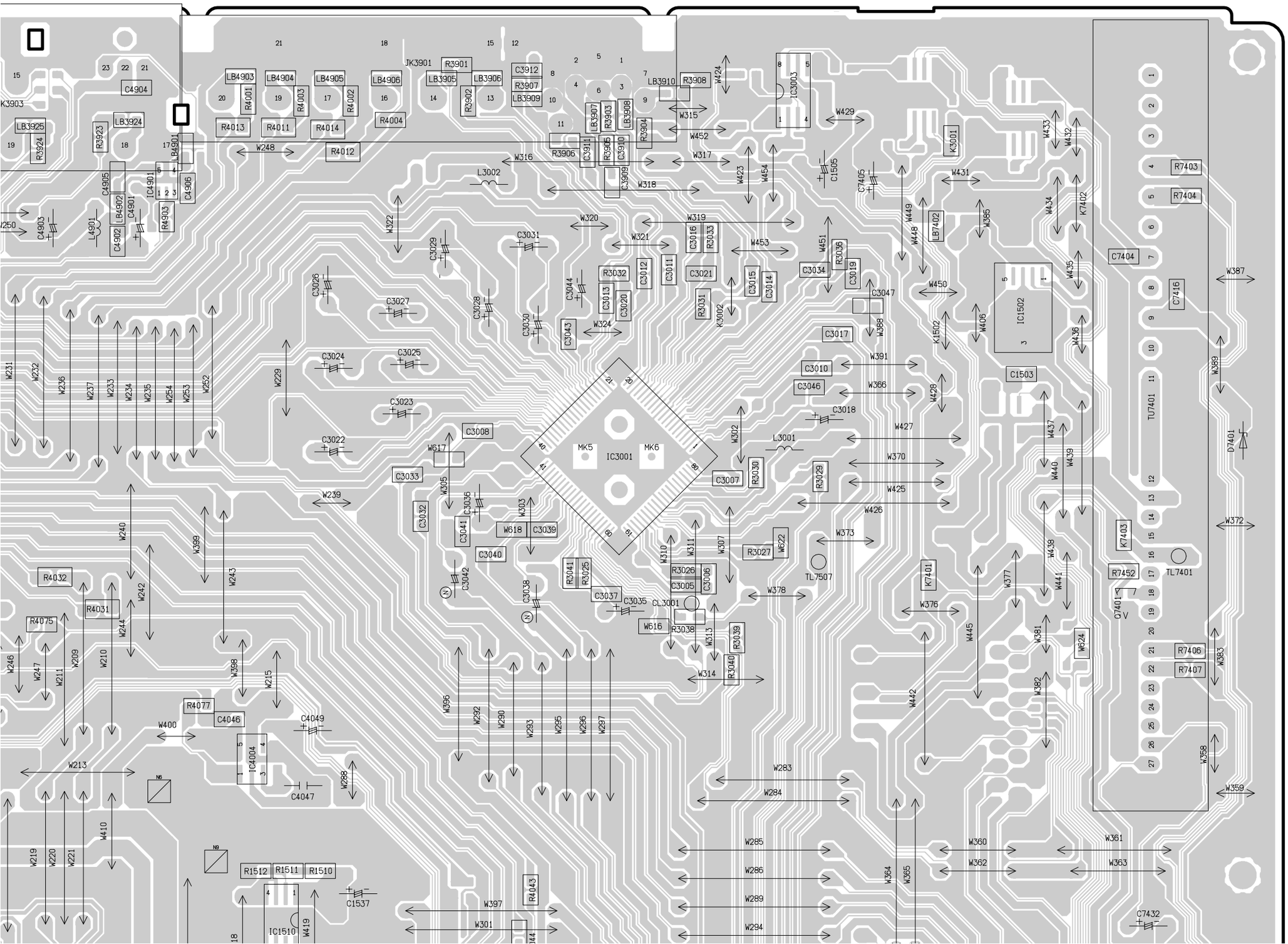
| Coil | |
|---|---|
| L1501 | C-1 |
| L3001 | E-7 |
| L3002 | F-6 |
| L4901 | F-4 |
| L7401 | C-5 |
| L7502 | B-1 |
| L7503 | B-2 |
| L7508 | C-3 |
| LB1501 | C-1 |
| LB1503 | C-1 |
| LB1504 | B-1 |
| LB1505 | B-1 |
| LB3905 | F-6 |
| LB3906 | F-6 |
| LB3907 | F-6 |
| LB3908 | F-6 |
| LB3909 | F-6 |
| LB3910 | F-6 |
| LB3915 | F-3 |
| LB3916 | F-3 |
| LB3917 | F-3 |
| LB3918 | F-3 |
| LB3919 | F-3 |
| LB3920 | F-3 |
| LB3924 | F-5 |
| LB3925 | F-4 |
| LB3926 | F-4 |
| LB3927 | A-7 |
| LB3928 | A-7 |
| LB3929 | A-7 |
| LB4901 | F-5 |
| LB4902 | F-5 |
| LB4903 | F-5 |
| LB4904 | F-5 |
| LB4905 | F-5 |
| LB4906 | F-5 |
| LB4907 | F-2 |
| LB4908 | F-2 |
| LB4909 | F-2 |
| LB4910 | F-3 |
| LB4911 | A-6 |
| LB4912 | A-6 |
| LB7402 | F-7 |
| LB7409 | B-6 |
| LB7410 | B-6 |
| LB7411 | B-6 |
| LB7412 | B-6 |
| LB7413 | B-5 |
| LB7501 | C-4 |
| LB7502 | B-4 |
| LB7503 | B-2 |
| LB7504 | B-2 |
| LB7505 | B-2 |
| LB7506 | B-2 |
| LB7507 | B-3 |
| LB7508 | B-3 |

| Capacitor | |
|---|---|
| C1503 | E-7 |
| C1505 | F-7 |
| C1512 | B-2 |
| C1513 | C-2 |
| C1514 | C-2 |
| C1515 | C-2 |
| C1516 | B-6 |
| C1518 | B-6 |
| C1519 | B-6 |
| C1520 | C-2 |
| C1521 | C-2 |
| C1522 | C-2 |
| C1523 | B-5 |
| C1524 | B-5 |
| C1527 | C-5 |
| C1528 | C-5 |
| C1531 | C-5 |
| C1533 | C-5 |
| C1534 | C-5 |
| C1537 | C-5 |
| C1539 | D-2 |
| C1540 | D-1 |
| C1541 | C-1 |
| C1543 | D-2 |
| C1545 | B-5 |
| C3001 | A-7 |
| C3005 | D-6 |
| C3006 | D-6 |
| C3007 | E-6 |
| C3008 | E-6 |
| C3010 | E-7 |
| C3011 | E-6 |
| C3012 | E-6 |
| C3013 | E-6 |
| C3014 | E-7 |
| C3015 | E-7 |
| C3016 | E-6 |
| C3017 | E-7 |
| C3018 | E-7 |
| C3019 | E-7 |
| C3020 | E-6 |
| C3021 | E-6 |
| C3022 | E-5 |
| C3023 | E-5 |
| C3024 | E-5 |
| C3025 | E-5 |
| C3026 | E-5 |
| C3027 | E-5 |
| C3028 | E-6 |
| C3029 | E-6 |
| C3030 | E-6 |
| C3031 | E-6 |
| C3032 | E-6 |
| C3033 | E-5 |
| C3034 | E-7 |
| C3035 | D-6 |
| C3036 | E-6 |
| C3037 | D-6 |
| C3038 | D-6 |
| C3039 | E-6 |
| C3040 | E-6 |
| C3041 | E-6 |
| C3042 | D-6 |
| C3043 | E-6 |
| C3044 | E-6 |
| C3046 | E-7 |
| C3047 | E-7 |
| C3901 | A-7 |
| C3902 | A-7 |
| C3909 | F-6 |
| C3910 | F-6 |
| C3911 | F-6 |
| C3912 | F-6 |
| C3917 | F-3 |
| C3918 | F-3 |
| C4003 | E-4 |
| C4004 | E-4 |
| C4005 | E-4 |
| C4006 | E-4 |
| C4009 | E-4 |
| C4010 | E-4 |
| C4011 | E-4 |
| C4013 | C-7 |
| C4014 | C-7 |
| C4016 | D-3 |
| C4017 | D-4 |
| C4019 | D-4 |
| C4022 | D-4 |
| C4023 | D-4 |
| C4024 | D-4 |
| C4025 | D-4 |
| C4026 | B-6 |
| C4027 | B-6 |
| C4028 | C-6 |
| C4029 | C-6 |
| C4036 | D-3 |
| C4037 | E-3 |
| C4038 | E-3 |
| C4039 | F-3 |
| C4040 | F-2 |
| C4041 | F-3 |
| C4042 | F-2 |
| C4045 | E-2 |
| C4046 | D-5 |
| C4047 | D-5 |
| C4049 | D-5 |
| C4050 | E-2 |
| C4052 | E-2 |
| C4901 | F-5 |
| C4902 | E-5 |
| C4903 | F-4 |
| C7401 | B-6 |
| C7403 | B-6 |
| C7404 | E-8 |
| C7405 | F-7 |
| C7406 | B-6 |
| C7407 | B-6 |
| C7416 | E-8 |
| C7417 | C-8 |
| C7432 | C-8 |
| C7433 | C-8 |
| C7436 | B-8 |
| C7437 | B-8 |
| C7525 | B-3 |
| C7526 | B-3 |
| C7528 | A-3 |
| C7550 | A-2 |
| C7551 | A-1 |
| C7552 | B-2 |
| C7555 | A-1 |
| C7556 | A-1 |
| C7557 | B-2 |
| C7558 | A-1 |
| C7559 | B-2 |
| C7560 | A-1 |
| C7565 | A-7 |
| C7566 | A-7 |
| C7567 | B-3 |
| C7569 | A-7 |
| C7580 | B-3 |
| C7581 | B-3 |
| C7582 | B-3 |
| C7583 | B-3 |
| C7584 | B-4 |
| C7585 | B-4 |
| C7586 | B-4 |
| C7587 | B-3 |
| C7588 | B-4 |
| C7589 | B-4 |
| C7595 | C-4 |
| C7596 | C-4 |
| C7597 | C-4 |
| C7598 | C-4 |
| C7599 | C-4 |
| C7600 | C-4 |
| C7601 | C-4 |
| C7602 | C-3 |
| C7604 | C-3 |
| C7607 | B-3 |
| C7609 | C-4 |
| C7610 | C-4 |
| C7611 | A-8 |
| C7612 | C-3 |
| C7613 | C-3 |
| C7618 | C-2 |
| C7620 | C-3 |
| C7626 | C-2 |
| C7633 | B-1 |
| C7636 | E-2 |
| C7637 | E-1 |
| C7639 | E-1 |
| C7650 | C-3 |
| C7652 | C-4 |
| C7653 | C-3 |
| C7654 | B-3 |
| C7657 | A-3 |

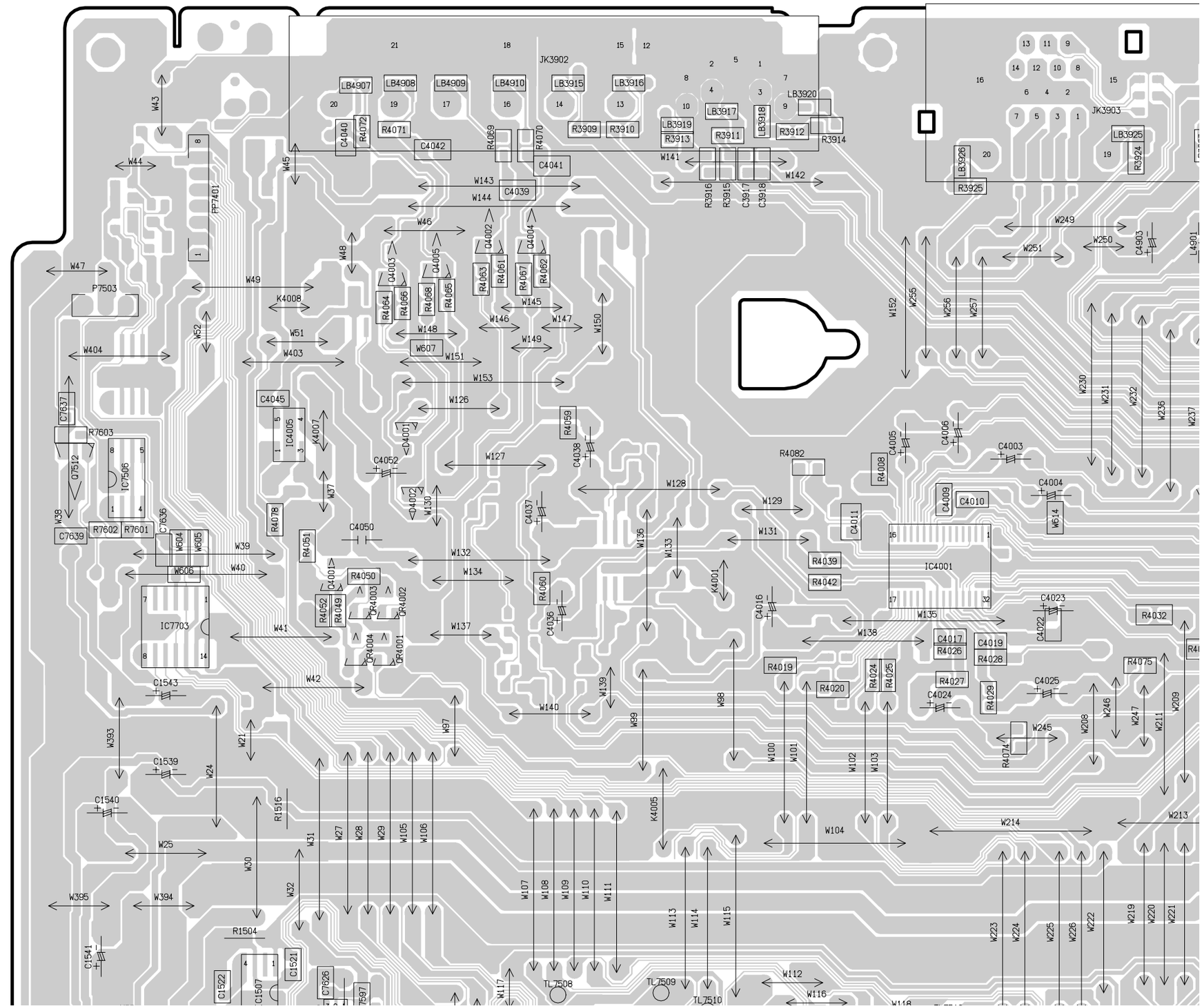
| Resistor | |
|---|---|
| R1501 | B-2 |
| R1502 | B-2 |
| R1503 | B-2 |
| R1504 | D-2 |
| R1506 | B-5 |
| R1507 | C-5 |
| R1508 | C-5 |
| R1509 | C-5 |
| R1510 | D-5 |
| R1511 | D-5 |
| R1512 | D-5 |
| R1515 | C-5 |
| R1516 | D-2 |
| R3025 | D-6 |
| R3026 | D-6 |
| R3027 | E-7 |
| R3028 | A-7 |
| R3029 | E-7 |
| R3030 | E-7 |
| R3031 | E-6 |
| R3032 | E-6 |
| R3033 | E-6 |
| R3036 | E-7 |
| R3038 | D-6 |
| R3039 | D-6 |
| R3040 | D-6 |
| R3041 | D-6 |
| R3901 | F-6 |
| R3902 | F-6 |
| R3903 | F-6 |
| R3904 | F-6 |
| R3905 | F-6 |
| R3906 | F-6 |
| R3907 | F-6 |
| R3908 | F-6 |
| R3909 | F-3 |
| R3910 | F-3 |
| R3911 | F-3 |
| R3912 | F-3 |
| R3913 | F-3 |
| R3914 | F-3 |
| R3915 | F-3 |
| R3916 | F-3 |
| R3923 | F-5 |
| R3924 | F-4 |
| R3925 | F-4 |
| R3926 | A-7 |
| R3927 | A-7 |
| R3928 | A-7 |
| R3929 | A-7 |
| R4001 | F-5 |
| R4002 | F-5 |
| R4003 | F-5 |
| R4004 | F-5 |
| R4008 | E-4 |
| R4011 | F-5 |
| R4012 | F-5 |
| R4013 | F-5 |
| R4014 | F-5 |
| R4015 | C-7 |
| R4016 | C-7 |
| R4017 | C-7 |
| R4018 | C-7 |
| R4019 | D-3 |
| R4020 | D-3 |
| R4024 | D-4 |
| R4025 | D-4 |
| R4026 | D-4 |
| R4027 | D-4 |
| R4028 | D-4 |
| R4029 | D-4 |
| R4031 | D-5 |
| R4032 | D-4 |
| R4037 | A-6 |
| R4038 | A-6 |
| R4039 | E-3 |
| R4042 | E-3 |
| R4043 | C-6 |
| R4044 | C-6 |
| R4045 | C-6 |
| R4046 | C-6 |
| R4049 | D-2 |
| R4050 | E-2 |
| R4051 | E-2 |
| R4052 | D-2 |
| R4059 | E-3 |
| R4060 | E-3 |
| R4061 | E-2 |
| R4062 | E-3 |
| R4063 | E-2 |
| R4064 | E-2 |
| R4065 | E-2 |
| R4066 | E-2 |
| R4067 | E-3 |
| R4068 | E-2 |
| R4069 | F-3 |
| R4070 | F-3 |
| R4071 | F-2 |
| R4072 | F-2 |
| R4074 | D-4 |
| R4075 | D-4 |
| R4077 | D-5 |
| R4078 | E-2 |
| R4082 | E-3 |
| R4903 | F-5 |
| R7403 | F-8 |
| R7404 | F-8 |
| R7406 | D-8 |
| R7407 | D-8 |
| R7418 | C-8 |
| R7419 | C-8 |
| R7442 | B-8 |
| R7443 | B-8 |
| R7444 | B-8 |
| R7445 | B-8 |
| R7446 | B-8 |
| R7452 | D-8 |
| R7454 | C-7 |
| R7505 | B-3 |
| R7506 | B-2 |
| R7507 | B-2 |
| R7508 | B-2 |
| R7509 | B-2 |
| R7510 | B-2 |
| R7511 | A-2 |
| R7512 | A-2 |
| R7513 | B-2 |
| R7514 | B-2 |
| R7516 | A-4 |
| R7519 | A-7 |
| R7520 | A-7 |
| R7521 | A-6 |
| R7522 | A-6 |
| R7523 | A-7 |
| R7530 | B-4 |
| R7531 | B-4 |
| R7532 | B-4 |
| R7533 | B-4 |
| R7534 | B-3 |
| R7535 | B-3 |
| R7536 | B-3 |
| R7537 | B-3 |
| R7538 | B-4 |
| R7539 | B-4 |
| R7540 | B-4 |
| R7541 | B-4 |
| R7542 | B-4 |
| R7548 | C-4 |
| R7549 | C-4 |
| R7550 | C-4 |
| R7551 | C-4 |
| R7556 | C-4 |
| R7557 | C-4 |
| R7561 | C-3 |
| R7562 | C-3 |
| R7563 | C-3 |
| R7564 | C-3 |
| R7569 | C-3 |
| R7570 | C-4 |
| R7583 | B-3 |
| R7584 | B-3 |
| R7585 | C-3 |
| R7588 | C-4 |
| R7589 | B-3 |
| R7590 | B-3 |
| R7591 | B-3 |
| R7595 | C-2 |
| R7596 | C-2 |
| R7597 | C-2 |
| R7598 | C-2 |
| R7599 | B-4 |
| R7600 | B-4 |
| R7601 | E-1 |
| R7602 | E-1 |
| R7603 | E-1 |
| R7604 | A-8 |
| R7611 | B-4 |
| R7613 | B-4 |
| R7617 | A-5 |
| R7626 | C-2 |
| R7627 | C-2 |
| R7628 | C-2 |
| R7629 | C-2 |
| R7630 | A-2 |
| R7633 | C-4 |
| R7636 | B-3 |
| R7637 | B-3 |
| R7638 | B-3 |
| R7644 | A-5 |
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| Transformer | |
|---|---|
| T7501 | B-2 |

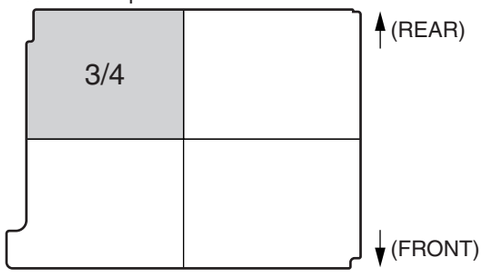
| Backup Battery | |
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| B7501 | C-2 |


JK3901
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LB4905
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C3912
R3907
LB3909
R3902
LB3910
R3908
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IC3003
W429
C4904
K3903
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R3924
R4001
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R3906
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R7404
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W451
R3036
C3034
C3019
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LB7402
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C3026
C3027
C3028
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C3044
C3043
R3032
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C3013
C3020
C3011
C3021
R3031
K3002
C3015
C3014
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C3047
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C7416
W231
W232
W236
W237
W233
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W254
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W252
W229
C3024
C3025
C3017
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IC1502
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C3010
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C1503
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C3023
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C3042
C3007
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W398
W215
R4032
R4031
R4075
R4077
C4046
C4049
W400
W213
IC4004
C4047
W288
W410
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R1512
R1511
R1510
C1537
IC1510
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R4043
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R3027
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C3087

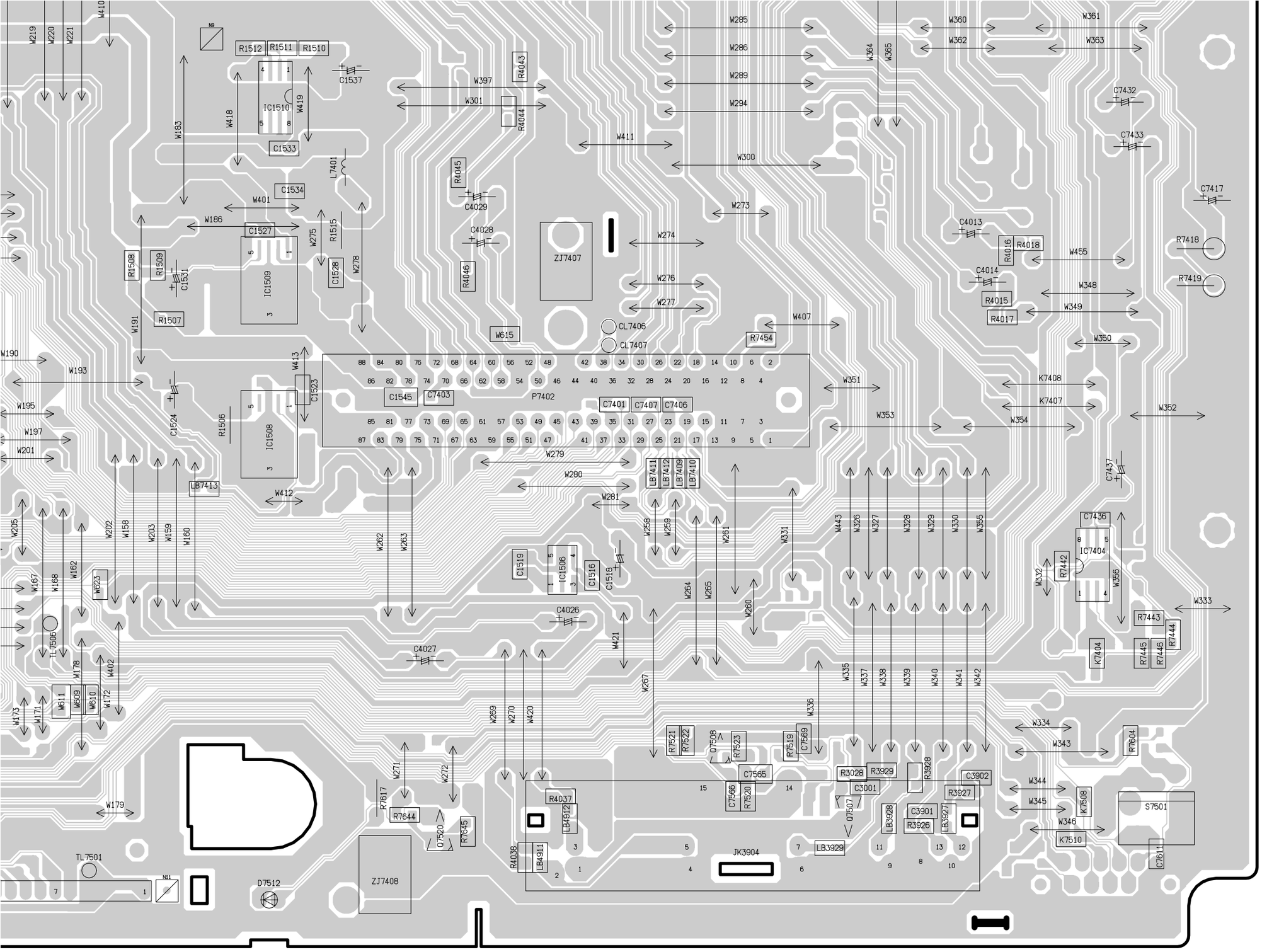
# Main P.C.B.

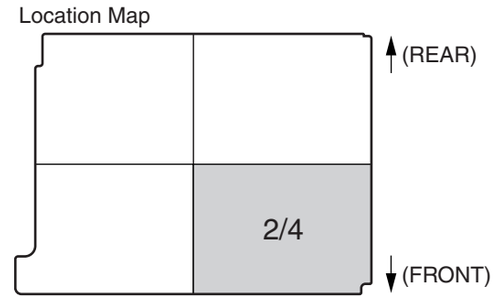



Location Map



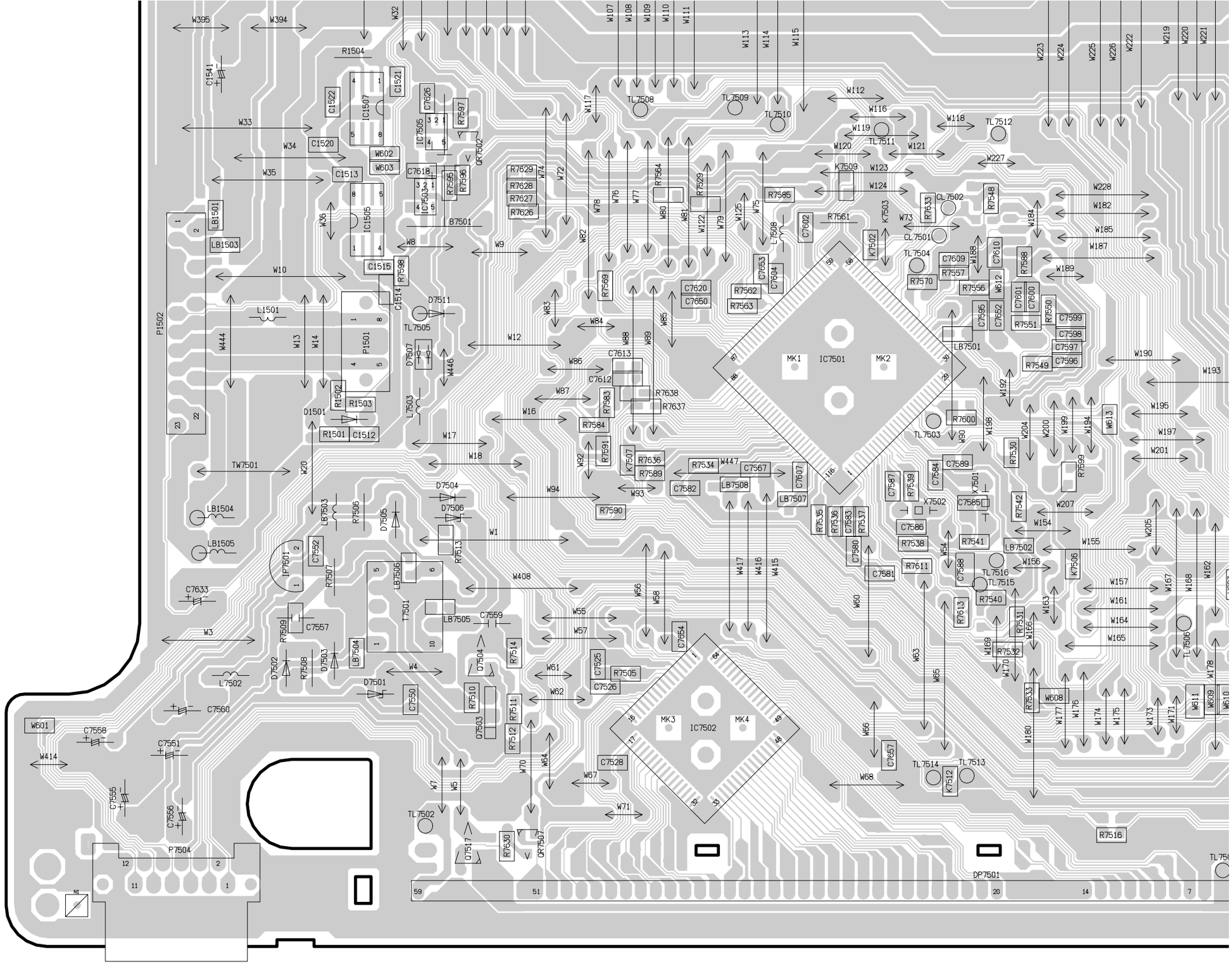

DMR-E95HP
Main P.C.B. (REP3662G)
(3/4 Section)



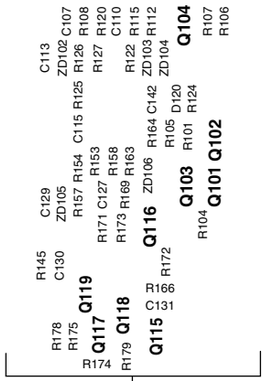




DMR-E95HP
Main P.C.B. (REP3662G)
(2/4 Section)

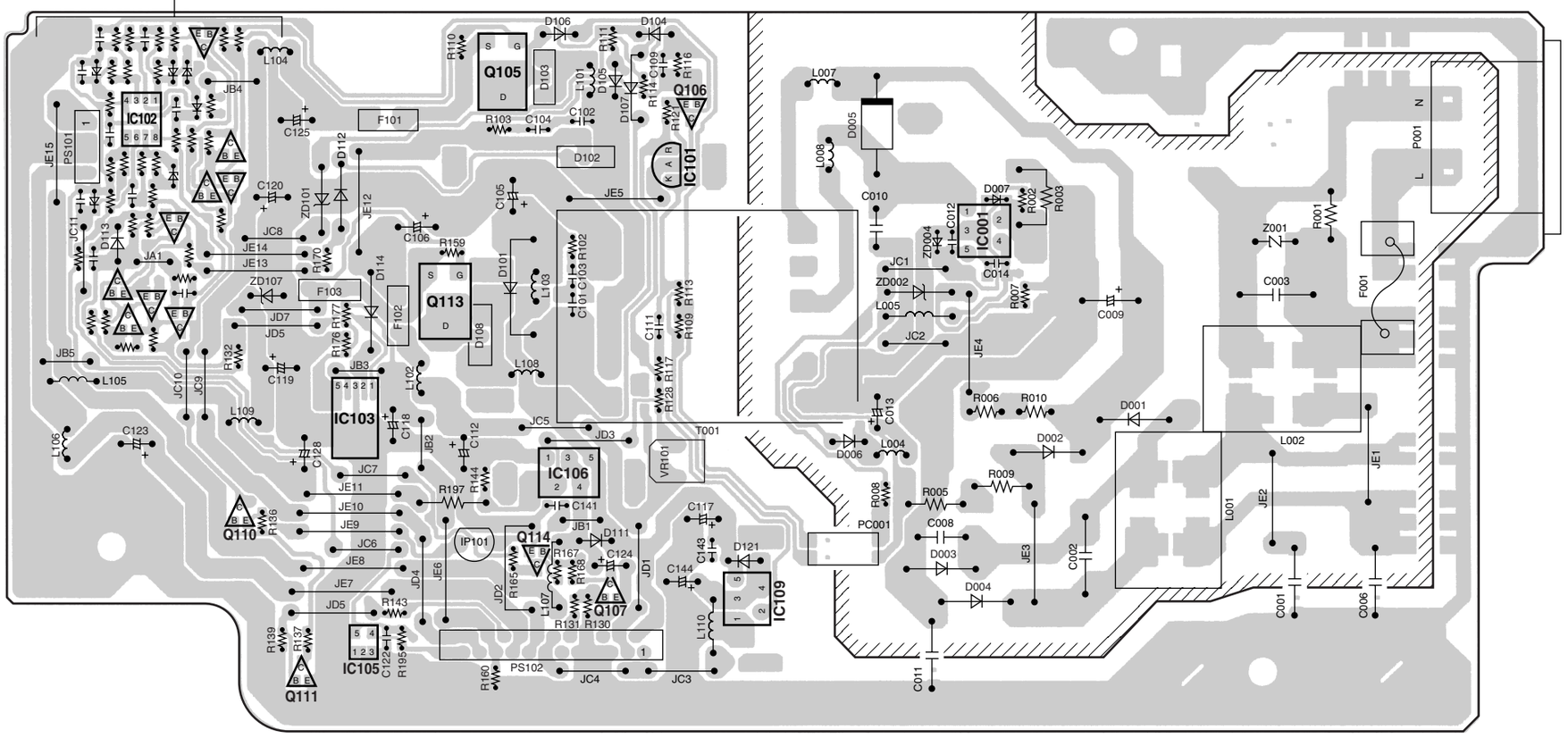
5 6 7 8


IC7501
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DP7501
TL7501
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K7506
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K7512
X7501
X7502
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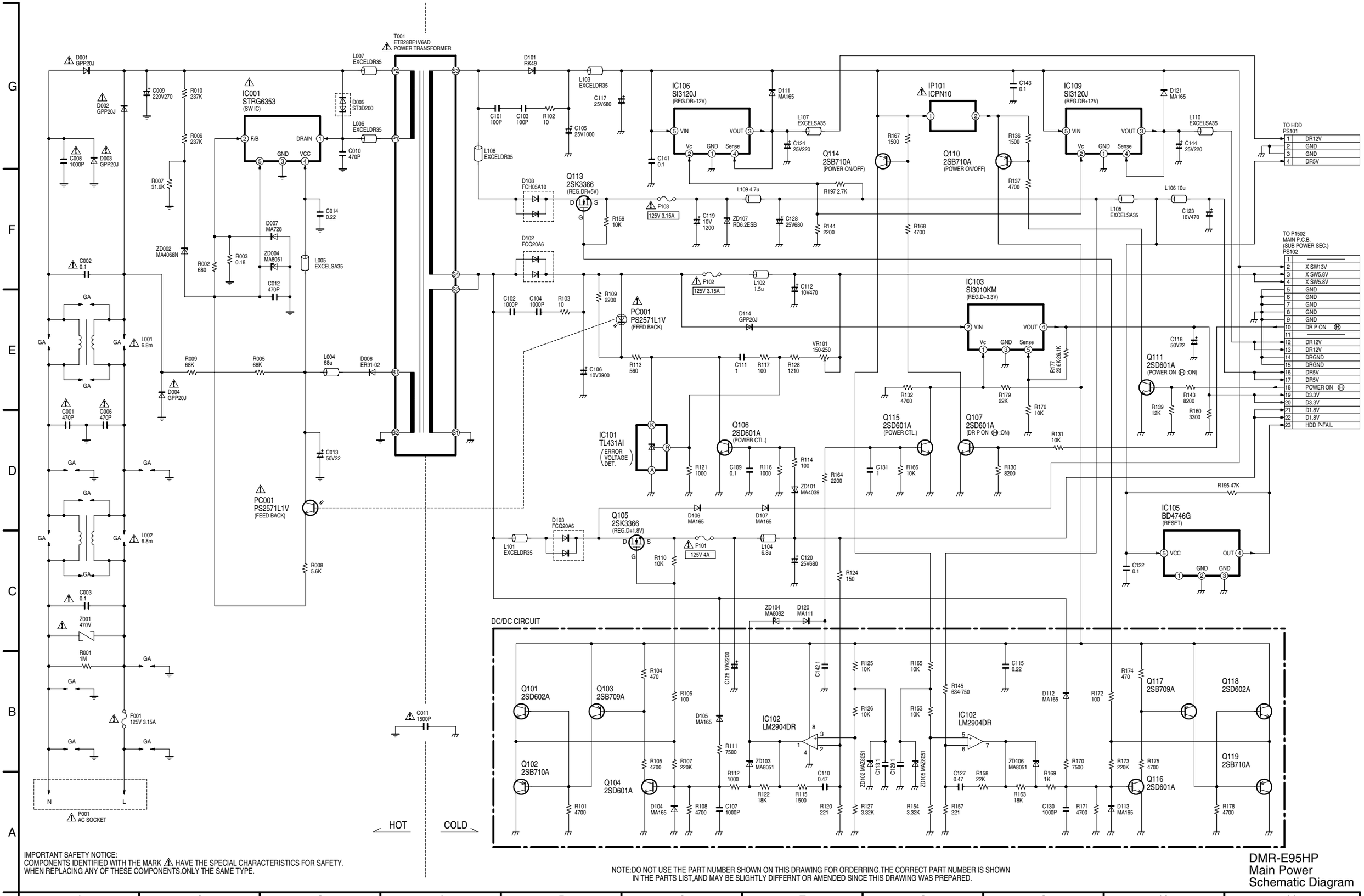
# Power P.C.B.




| Power P.C.B. | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Integrated Circuit** | | **Connector** | | Z001 | C-6 | L106 | B-1 | C105 | C-3 | **Resistor** | | R117 | C-4 | R165 | B-3 |
| IC001 | C-5 | P001 | D-7 | ZD002 | C-5 | L107 | B-3 | C106 | C-3 | R001 | C-6 | R120 | D-2 | R166 | C-2 |
| IC101 | C-4 | PS101 | C-1 | ZD004 | C-5 | L108 | C-3 | C107 | D-1 | R002 | C-5 | R121 | D-4 | R167 | B-3 |
| IC102 | D-2 | PS102 | A-3 | ZD101 | C-2 | L109 | B-2 | C109 | D-4 | R003 | C-5 | R122 | D-2 | R168 | B-3 |
| IC103 | B-2 | **Diode** | | ZD102 | D-1 | L110 | B-4 | C110 | D-2 | R005 | B-5 | R124 | D-2 | R169 | C-2 |
| IC105 | A-2 | D001 | B-6 | ZD103 | D-2 | **Fuse** | | C111 | C-4 | R006 | B-5 | R125 | D-1 | R170 | C-2 |
| IC106 | B-3 | D002 | B-5 | ZD104 | D-2 | F001 | C-7 | C112 | B-3 | R007 | C-5 | R126 | D-1 | R171 | C-2 |
| IC109 | B-4 | D003 | B-5 | ZD105 | C-1 | F101 | D-3 | C113 | D-1 | R008 | B-5 | R127 | D-2 | R172 | C-2 |
| **Transistor** | | D004 | B-5 | ZD106 | C-2 | F102 | C-3 | C115 | D-1 | R009 | B-5 | R128 | B-4 | R173 | C-2 |
| Q101 | C-2 | D005 | D-4 | ZD107 | C-2 | F103 | C-2 | C117 | B-4 | R010 | B-5 | R130 | B-3 | R174 | C-1 |
| Q102 | C-2 | D006 | B-4 | **IC Protector** | | **Capacitor** | | C118 | B-3 | R101 | C-2 | R131 | B-3 | R175 | C-1 |
| Q103 | C-2 | D007 | C-5 | IP101 | B-3 | C001 | B-6 | C119 | C-2 | R102 | C-3 | R132 | C-2 | R176 | C-2 |
| Q104 | D-2 | D101 | C-3 | **Transformer** | | C002 | B-5 | C120 | C-2 | R103 | D-3 | R136 | B-2 | R177 | C-2 |
| Q105 | D-3 | D102 | C-3 | T001 | B-4 | C003 | C-6 | C122 | A-3 | R104 | C-2 | R137 | A-2 | R178 | C-1 |
| Q106 | D-4 | D103 | D-3 | **Coil** | | C006 | B-7 | C123 | B-2 | R105 | C-2 | R139 | A-2 | R179 | C-2 |
| Q107 | B-3 | D104 | D-4 | L001 | B-6 | C008 | B-5 | C124 | B-3 | R106 | D-2 | R143 | B-3 | R195 | A-3 |
| Q110 | B-2 | D105 | D-3 | L002 | B-6 | C009 | C-5 | C125 | D-2 | R107 | D-2 | R144 | B-3 | R197 | B-3 |
| Q111 | A-2 | D106 | D-3 | L004 | B-5 | C010 | C-5 | C127 | C-2 | R108 | D-1 | R145 | C-1 | VR101 | B-4 |
| Q113 | C-3 | D107 | D-4 | L005 | C-5 | C011 | A-5 | C128 | B-2 | R109 | C-4 | R153 | C-2 | | |
| Q114 | B-3 | D108 | C-3 | L007 | D-4 | C012 | C-5 | C129 | C-1 | R110 | D-3 | R154 | C-1 | | |
| Q115 | C-2 | D111 | B-3 | L008 | C-4 | C013 | B-5 | C130 | C-1 | R111 | D-3 | R157 | C-1 | | |
| Q116 | C-2 | D112 | C-2 | L101 | D-3 | C014 | C-5 | C131 | C-2 | R112 | D-2 | R158 | C-2 | | |
| Q117 | C-2 | D113 | C-1 | L102 | C-3 | C101 | C-3 | C142 | D-3 | R114 | D-4 | R159 | C-3 | | |
| Q118 | C-2 | D114 | C-3 | L103 | C-3 | C102 | D-3 | C143 | C-3 | R115 | D-2 | R160 | A-3 | | |
| Q119 | C-1 | D120 | D-2 | L104 | D-2 | C103 | C-3 | C144 | B-4 | R116 | D-4 | R163 | C-2 | | |
| PC001 | B-5 | D121 | B-4 | L105 | C-1 | C104 | D-3 | C144 | B-4 | | | R164 | C-2 | | |



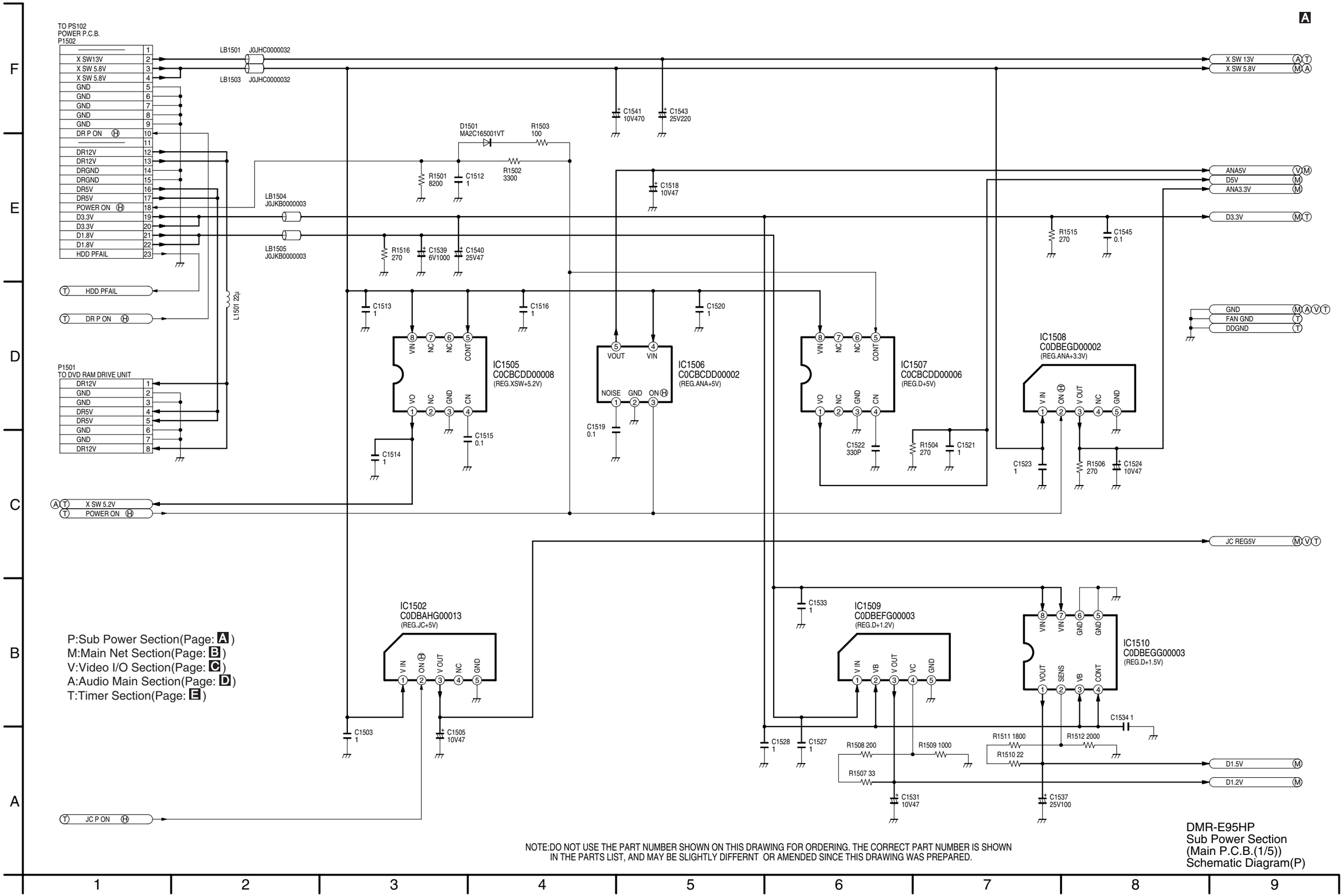

DMR-E95HP
Power P.C.B.
(ETXMM508A4F)

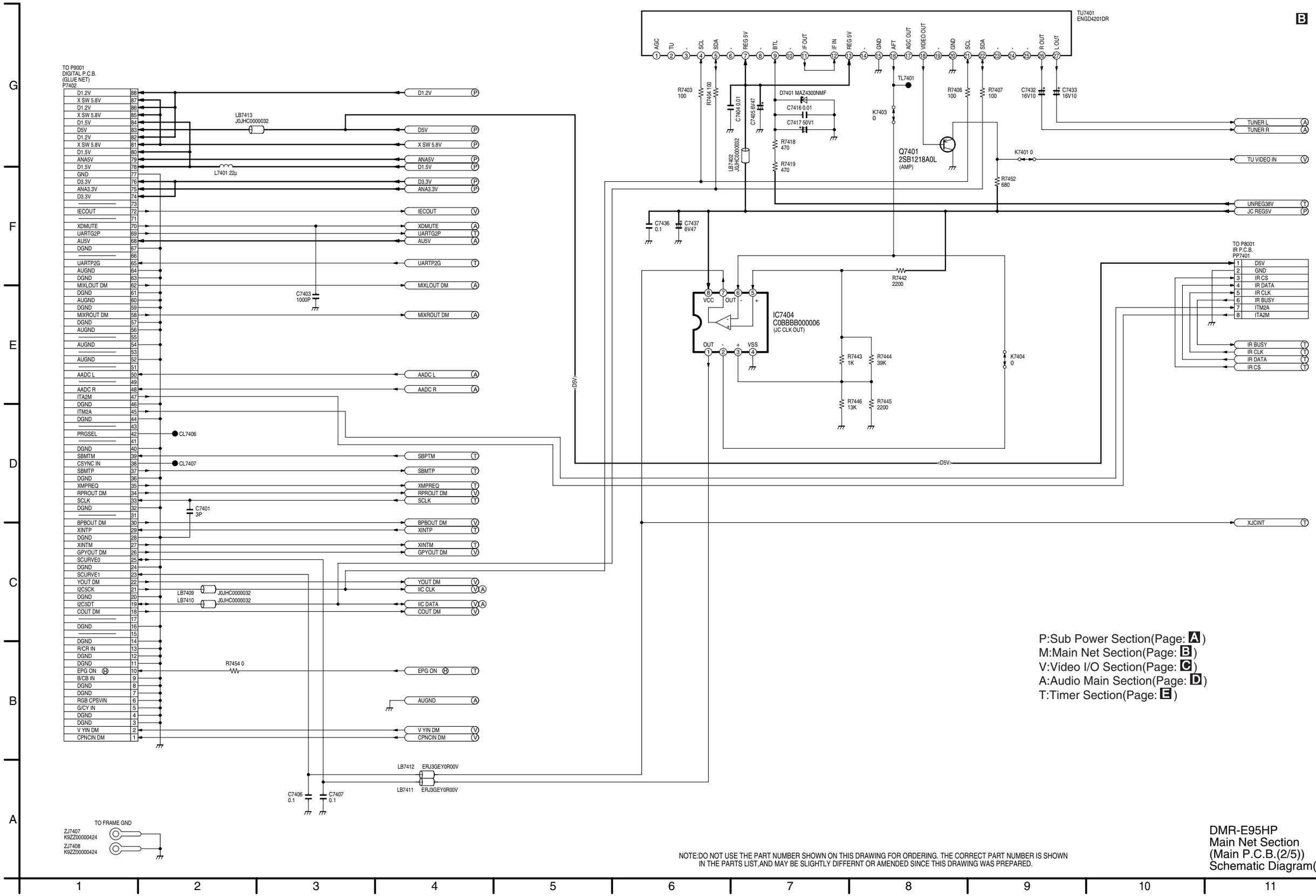



IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS.ONLY THE SAME TYPE.

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERRING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

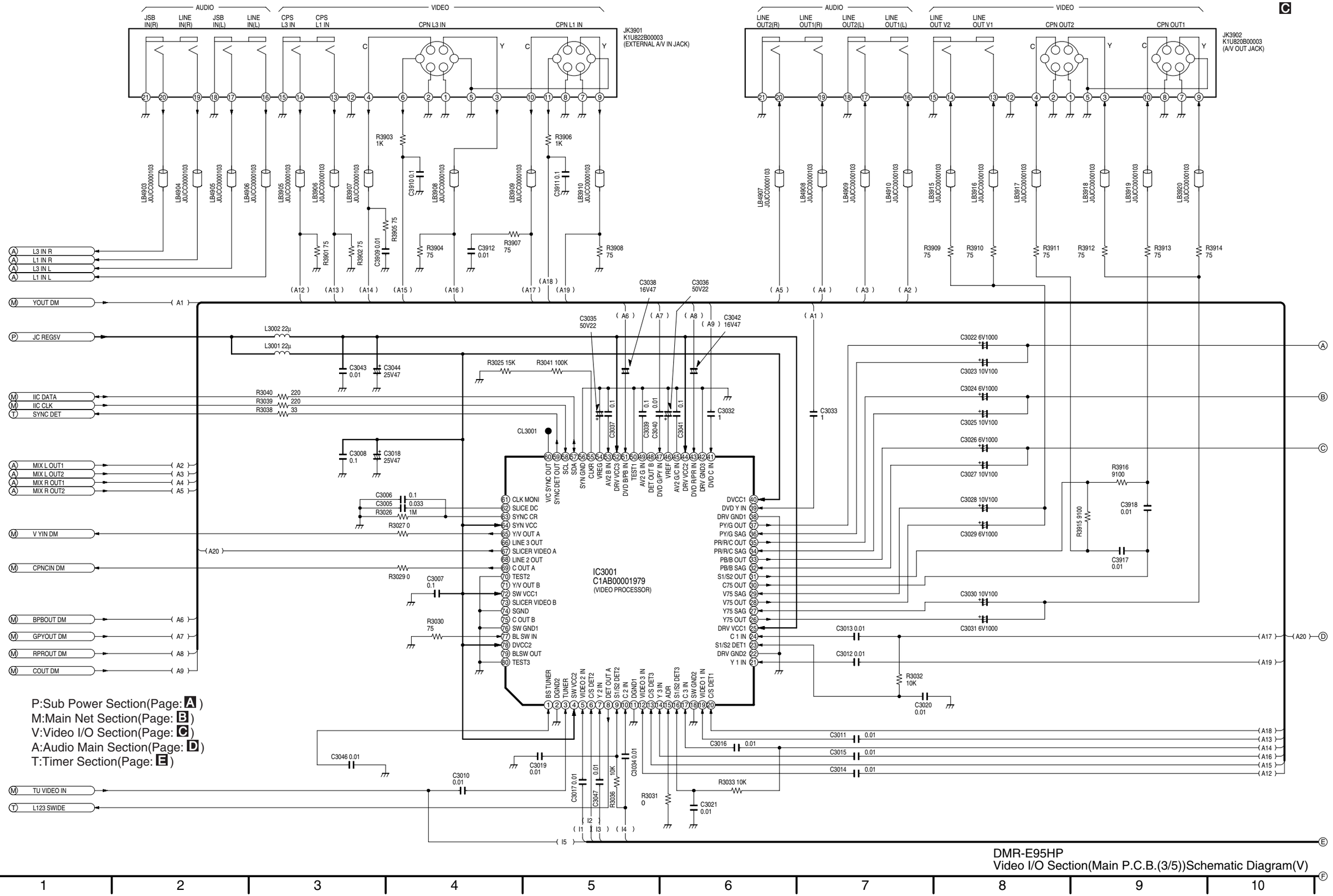
DMR-E95HP
Main Power
Schematic Diagram


A
TO PS102
POWER P.C.B.
P1502
X SW13V
X SW 5.8V
X SW 5.8V
GND
GND
GND
GND
GND
DR P ON H
DR12V
DR12V
DRGND
DRGND
DR5V
DR5V
POWER ON H
D3.3V
D3.3V
D1.8V
D1.8V
HDD PFAIL
LB1501 J0JHC0000032
LB1503 J0JHC0000032
LB1504 J0JKB0000003
LB1505 J0JKB0000003
L1501 22µ
C1541 10V470
C1543 25V220
D1501 MA2C165001VT
R1503 100
R1501 8200
C1512 1
R1502 3300
C1518 10V47
R1516 270
C1539 6V1000
C1540 25V47
C1513 1
C1516 1
C1520 1
R1515 270
C1545 0.1
X SW 13V
X SW 5.8V
ANA5V
D5V
ANA3.3V
D3.3V
GND
FAN GND
DDGND
HDD PFAIL
DR P ON H
P1501
TO DVD RAM DRIVE UNIT
DR12V
GND
GND
DR5V
DR5V
GND
GND
DR12V
IC1505
C0CBCDD00008
(REG.XSW+5.2V)
VIN NC NC CONT
VO NC GND CN
C1514 1
C1515 0.1
IC1506
C0CBCDD00002
(REG.ANA+5V)
VOUT VIN
NOISE GND ON H
C1519 0.1
IC1507
C0CBCDD00006
(REG.D+5V)
VIN NC NC CONT
VO NC GND CN
C1522 330P
R1504 270
C1521 1
IC1508
C0DBEGD00002
(REG.ANA+3.3V)
V IN ON H V OUT NC GND
C1523 1
R1506 270
C1524 10V47
X SW 5.2V
POWER ON H
JC REG5V
P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)
IC1502
C0DBAHG00013
(REG.JC+5V)
V IN ON H V OUT NC GND
C1503 1
C1505 10V47
C1533 1
IC1509
C0DBEFG00003
(REG.D+1.2V)
V IN VB V OUT VC GND
C1528 1
C1527 1
R1508 200
R1509 1000
R1507 33
C1531 10V47
IC1510
C0DBEGG00003
(REG.D+1.5V)
VIN VIN GND GND
VOUT SENS VB CONT
C1534 1
R1511 1800
R1512 2000
R1510 22
C1537 25V100
D1.5V
D1.2V
JC P ON H
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.
DMR-E95HP
Sub Power Section
(Main P.C.B.(1/5))
Schematic Diagram(P)
F
E
D
C
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8
9




NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E95HP
Main Net Section
(Main P.C.B.(2/5))
Schematic Diagram(M)




DMR-E95HP
Video I/O Section(Main P.C.B.(3/5))Schematic Diagram(V)

P:Sub Power Section(Page: A )
M:Main Net Section(Page: B )
V:Video I/O Section(Page: C )
A:Audio Main Section(Page: D )
T:Timer Section(Page: E )

C

JK3903
K1U407B00004

D1/D2
VIDEO OUT
(525P/525I)

COMPONENT
VIDEO OUT
(480P/480I)

PR/CR
(RED)

PB/CB
(BLUE)

Y
(GREEN)

DIGITAL
AUDIO OUT

GND VCC IN

LB3924
J0JCC0000103

LB3925
J0JCC0000103

LB3926
J0JCC0000103

R3923
75

R3924
75

R3925
75

C4904
0.1

C4903
6V47

L4901
22µ

C4902
0.1

C4901
6V47

LB4901
ERJ3GEYJ331V

LB4902
J0JGC0000020

C4905
0.1

IC4901
C0JBAB000173
(DIGITAL AUDIO OUT)

R4903 0

C4906
22P

IECOUT (M)

ANA5V (P)

GND (P)
AUGND (A)

A
B
C

K3001 0

R3028
470

C3001
560P

SYNC IN (T)

D

E

F

L2 IN L (A)
L2 IN R (A)

JK3904
K1U415B00001
(FRONT A/V JACK)

LB4912
J0JCC0000103

LB4911
J0JCC0000103

LB3929
J0JCC0000103

LB3928
J0JCC0000103

LB3927
J0JCC0000103

I1
I3
I4
I2

R3929
75

R3928
75

R3927
75

C3902
0.01

C3901
0.1

R3926
1K

LINE IN 2(R)

LINE IN 2(L)

CPS L2 IN

CPN L2 IN

DMR-E95HP
Video I/O Section(Main P.C.B.(3/5))Schematic Diagram(V)

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E95HP
Video I/O Section(Main P.C.B.(3/5))Schematic Diagram(V)

P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)

X SW 5.8V
X SW 13V
AU 5V
C4037 16V220
C4046 0.1
C4049 6V470
C4045 0.1
C4052 16V470
IC4004 C0CBCDC00026 (REG.AU+5V)
IC4005 C0CBCDC00027 (REG.AU+9V)
VIN VOUT ON GND NR
C4047 0.1
C4050 0.1
R4077 0
R4078 0
POWER ON
MIXLOUT DM
MIXROUT DM
AADC R
AADC L
C4028 16V10
C4029 16V10
R4043 3900
R4044 3900
R4046 6200
R4045 6200
L2 IN R
L2 IN L
R4037 100K
R4038 100K
C4027 50V1
C4026 50V1
IIC CLK
IIC DATA
R4024 100
R4025 100
METER R
METER L
R4020 0
R4019 0
C4022 0.1
C4023 16V470
R4032 1K
R4031 1K
R4028 12K
R4026 12K
C4019 82P
C4017 82P
C4016 16V220
IC4001 C1AB00001920 (AUDIO SOUND PROCESSOR)
FRONT1 FRONT2 VCC OUTL OUTR LS DAL DAR RFOUT REGFIL GND SDA SCL POFF H DC2 DC1
TUIL TUIR CAP1 NC TUOL TUOR CAP2 EXT11 EXT12 EXT21 EXT22 EXT31 EXT32 DETL DETR
R4082 0
TUNER L
TUNER R
R4017 0
R4018 0
C4014 50V1
C4013 50V1
R4015 100K
R4016 100K
C4011 0.1
C4004 50V1
C4003 50V1
C4006 50V1
C4005 50V1
Except C/H/J/L
C4009 0.1
C4010 0.1
R4012 1K
R4011 1K
R4014 1K
R4013 1K
R4008 0
L1 IN L
L1 IN R
L3 IN L
L3 IN R
R4004 100K
R4003 100K
R4002 100K
R4001 100K
R4075 0
R4074 0
C4025 16V47
C4024 16V47
R4029 6200
R4027 6200
R4039 0
R4042 0
C4038 16V47
C4036 16V47
R4059 47K
R4060 47K
R4061 680
R4062 680
R4065 680
R4066 680
C4039 1000P
C4040 1000P
C4041 1000P
C4042 1000P
R4069 220
R4070 220
R4071 220
R4072 220
MIX L OUT2
MIX L OUT1
MIX R OUT1
MIX R OUT2
D4001 MA3Z142D0LG
R4063 2700
R4064 2700
Q4002 2SD132800L (MUTE)
Q4003 2SD132800L (MUTE)
D4002 MA3Z142D0LG
R4067 2700
R4068 2700
Q4004 2SD132800L (MUTE)
Q4005 2SD132800L (MUTE)
X SW 5.2V
R4052 10K
R4051 10K
R4050 10K
R4049 10K
Q4001 2SB1218A0L (MUTE)
QR4004 UNR521100L (MUTE)
QR4003 UNR521100L (MUTE)
QR4001 UNR521100L (MUTE)
QR4002 UNR521100L (MUTE)
AU GND
GND
XTMUTE
XDMUTE

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DMR-E95HP
Audio Main Section
(Main P.C.B.(4/5))
Schematic Diagram(A)

P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)

IC7501
C2CBJG000446
(TIMER)

DMR-E95HP
Timer Section(Main P.C.B.(5/5)) Schematic Diagram(T)

E

P:Sub Power Section(Page: A)
M:Main Net Section(Page: B)
V:Video I/O Section(Page: C)
A:Audio Main Section(Page: D)
T:Timer Section(Page: E)

DP7501
A2BD00000074
(DISPLAY)

TL7501

TL7502

IC7502
C0HBB0000033
(DISPLAY DRIVE)

Q7517
2SD132800L
(FIP CONTROL)

QR7507
UNR511300L
(FILAMENT L :ON)

D7501
MAZ4240NMF

C7550
0.01

C7551
50V22

R7507
330

LB7503
J0JKB0000037

C7552
0.1

R7508
5.6

R7513
47K

C7558
50V56

T7501
ETS13TB119AP
(TRANSFORMER)

D7502
B0AAGM000007

LB7504
J0JGC0000020

LB7505
J0JCC0000103

D7504
MA2C18500E

C7556
10V220

C7559
0.022

R7509
33K

C7557
0.047

D7503
B0HAGR000002

L7502
100µ

C7555
25V220

R7510
3300

R7514
100

D7506
MAZ4300NLF

Q7503
2SD1994BR1VT
(POWER SAVE H :ON)

R7511
10K

Q7504
2SD0601A0L
(POWER SAVE H :ON)

R7512
47K

LB7506
J0JCC0000103

D7505
MA2C18500E

IP7501
D4FAR4000001

C7560
50V22

UNREG38V (M)
DDGND (P)

X SW 13V (P)

GND (P)

FAN GND (P)

TO FAN MOTOR
P7503
1 FANDCOUT
2 GND
3 FANLOCK

D3.3V (P)

X SW 5.2V (P)

IC7503
C0EBJ0000110
(RESET)

IC7505
C0EBE0000194
(SYS PFAIL L OUT)

C7618
0.01

C7626
0.01

R7595
47K

R7596
47K

QR7502
UNR521200L
(INV.)

R7597
15K

C7657
0.1

C7654
0.01

R7505
27K

C7525
100P

C7526
0.1

C7528
0.1

D7507
B0JDCE000002

D7511
B0JACE000001

TL7505

C7633
6V470

R7598
1K

B7501
CR2354-1GUF
BACK-UP BATTERY

R7600
10K

C7636
1

IC7506
C0ABBA000146
(FAN MOTOR DRIVE)

R7601
10K

C7637
0.01

C7639
0.1

Q7512
2SD0874A0L
(FAN MOTOR SWITCH)

R7602 820

R7603 18K

<XSW 5.2V>

<NSW 5V>

(B17) (B18) (B19) (B20) (B21) (B22)

DMR-E95HP
Timer Section(Main P.C.B.(5/5)) Schematic Diagram(T)

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

DMR-E95HP
Timer Section(Main P.C.B.(5/5))
Schematic Diagram(T)

12 13 14 15 16 17 18 19 20 21 22

GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)
DV:DV1394 Section(Page: K)

IC6701
C1ZBZ0002433
(GLUE)

Q6701
B1ABCF000114
(BUFFER)

DMR-E95HP
Glue Net Section(Digital P.C.B.(1/6)) Schematic Diagram(GN)

GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)
DV:DV1394 Section(Page: K)

# DMR-E95HP
## Glue Net Section(Digital P.C.B.(1/6))
## Schematic Diagram(GN)

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DMR-E95HP
Glue Net Section(Digital P.C.B.(1/6))
Schematic Diagram(GN)

GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)
DV:DV1394 Section(Page: K)

DMR-E95HP AV Encoder Section(Digital P.C.B.(2/6)) Schematic Diagram(EN)

IC3404
MN85573
(AVENC)


DMR-E95HP AV Encoder Section(Digital P.C.B.(2/6)) Schematic Diagram(EN)

GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)
DV:DV1394 Section(Page: K)

D3.3V

RX3421 22X4 (D4 D6 D5 D7) — ED7 ED6 ED5 ED4
RX3422 22X4 (D8 D10 D9 D11) — ED3 ED2 ED1 ED0
R3432 22, R3433 22, R3434 22 (D1 D3 D2) — CDACK CDREADY RCLKI
RX3410 22X4 (C1 C3 C2 C4) — R656ENC7 R656ENC6 R656ENC5 R656ENC4
RX3411 22X4 (C5 C7 C6 C8) — R656ENC3 R656ENC2 R656ENC1 R656ENC0

R656ENC7 R656ENC6 R656ENC5 R656ENC4 R656ENC3 R656ENC2 R656ENC1 R656ENC0 (M)
CDACK RCLKI CDREADY (TR)
ED7 ED6 ED5 ED4 ED3 ED2 ED1 ED0 (TR)
XMRE XMWE3 XVDSPCS XVDSPDK XIRQ6 XRTSCINT (M)
MSD31 MSD30 MSD29 MSD28 MSD27 MSD26 MSD25 MSD24 MSD23 MSD22 MSD21 MSD20 MSD19 MSD18 MSD17 MSD16 (SI)
SA12 SA11 SA10 SA9 SA8 SA7 SA6 SA5 MSA4 MSA3 MSA2 MSA1 (M)

RX3439 22X4 (MDQA15 MDQA14 MDQA13 MDQA12)
RX3440 22X4 (MDQA11 MDQA10 MDQA9 MDQA8)
RX3441 22X4 (MA9 MA8 MA7 MA6)
RX3442 22X4 (MA5 MA4 MA3)
RX3443 22X4 (MDQA31 MDQA30 MDQA29 MDQA28)
RX3444 22X4 (MDQA27 MDQA26 MDQA25 MDQA24)

LB3409 J0JHC0000032, FL3435 F1H0J4740004
LB3408 J0JHC0000032, FL3434 F1H0J4740004

IC3408
C3ABPJ000052
(32bit/64M SDRAM)

VSS DQ16 VSSQ DQ17 DQ18 VCCQ DQ19 DQ20 VSSQ DQ21 DQ22 NC VSS DQM1 NC NC CLK CKE A9 A8 A7 A6 A5 A4 DQM3 VSS NC DQ31 VCCQ DQ30 DQ29 VSSQ DQ28 DQ27 VCCQ DQ26 DQ25 VSSQ DQ24 VSS
VCC DQ0 VCCQ DQ1 DQ2 VSSQ DQ3 DQ4 VCCQ DQ5 DQ6 VSSQ DQ7 NC VCC DQM0 WE CAS RAS CS NC BA0 BA1 A10 A0 A1 A2 DQM2 VCC NC DQ16 VSSQ DQ17 DQ18 VCCQ DQ19 DQ20 VSSQ DQ21 DQ22 VCCQ DQ23 VCC

RX3433 22X4 (MDQA0 MDQA1 MDQA2 MDQA3)
RX3434 22X4 (MDQA4 MDQA5 MDQA6 MDQA7)
RX3435 22X4
RX3436 22X4 (MAA10 MAA1 MAA2)
RX3437 22X4 (MDQA16 MDQA17 MDQA18 MDQA19)
RX3438 22X4 (MDQA20 MDQA21 MDQA22 MDQA23)
R3472 22, R3473 22

(I10 I11 I8 I9 I14 I15 I13 I12 I7)

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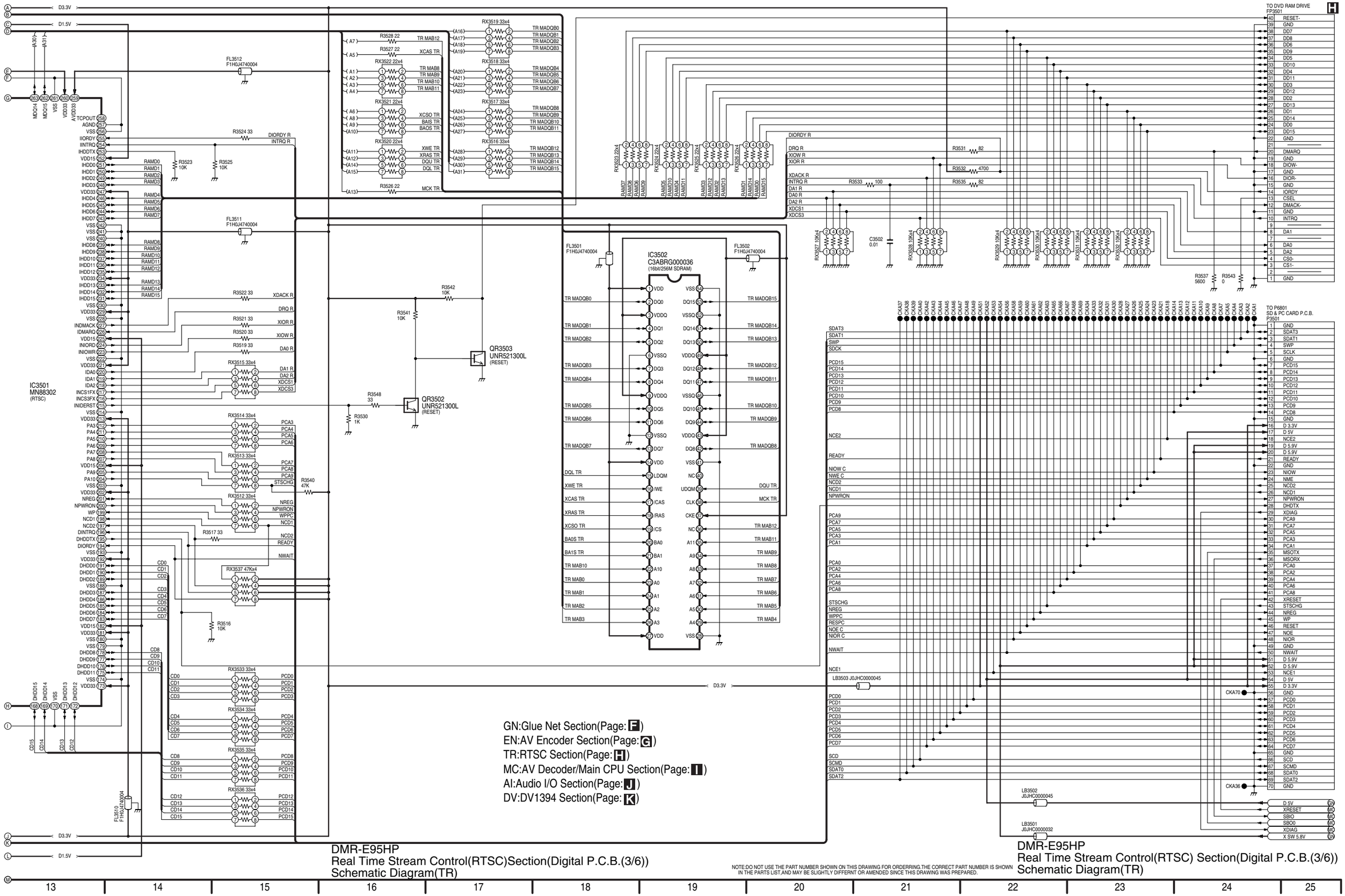
DMR-E95HP
AV Encoder Section(Digital P.C.B.(2/6))
Schematic Diagram(EN)

DMR-E95HP AV Encoder Section(Digital P.C.B.(2/6)) Schematic Diagram(EN)

GN:Glue Net Section(Page: F )
EN:AV Encoder Section(Page: G )
TR:RTSC Section(Page: H )
MC:AV Decoder/Main CPU Section(Page: I )
AI:Audio I/O Section(Page: J )
DV:DV1394 Section(Page: K )

IC3501
MN88302
(RTSC)

DMR-E95HP Real Time Stream Control(RTSC) Section(Digital P.C.B.(3/6)) ☞Schematic Diagram(TR)




DMR-E95HP
Real Time Stream Control(RTSC)Section(Digital P.C.B.(3/6))
Schematic Diagram(TR)

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DMR-E95HP
Real Time Stream Control(RTSC) Section(Digital P.C.B.(3/6))
Schematic Diagram(TR)

GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)
DV:DV1394 Section(Page: K)

IC6001
MN2DS0011-H
(AVDEC/MAIN CPU)

TO DIGITAL JIG
P6002

| | |
|---|---|
| XDIAG | 1 |
| XRESET | 2 |
| MSORX | 3 |
| GND | 4 |
| D3.3V | 5 |
| MSOTX | 6 |

DMR-E95HP AV Decoder/Main CPU Section(Digital P.C.B.(4/6)) Schematic Diagram(MC)

GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)
DV:DV1394 Section(Page: K)

IC6001
MN2DS0011-H
(AVDEC/MAIN CPU)

DMR-E95HP AV Decoder/Main CPU Section(Digital P.C.B.(4/6)) Schematic Diagram(MC)

DMR-E95HP
AV Decoder/Main CPU Section(Digital P.C.B.(4/6)) Schematic Diagram(MC)

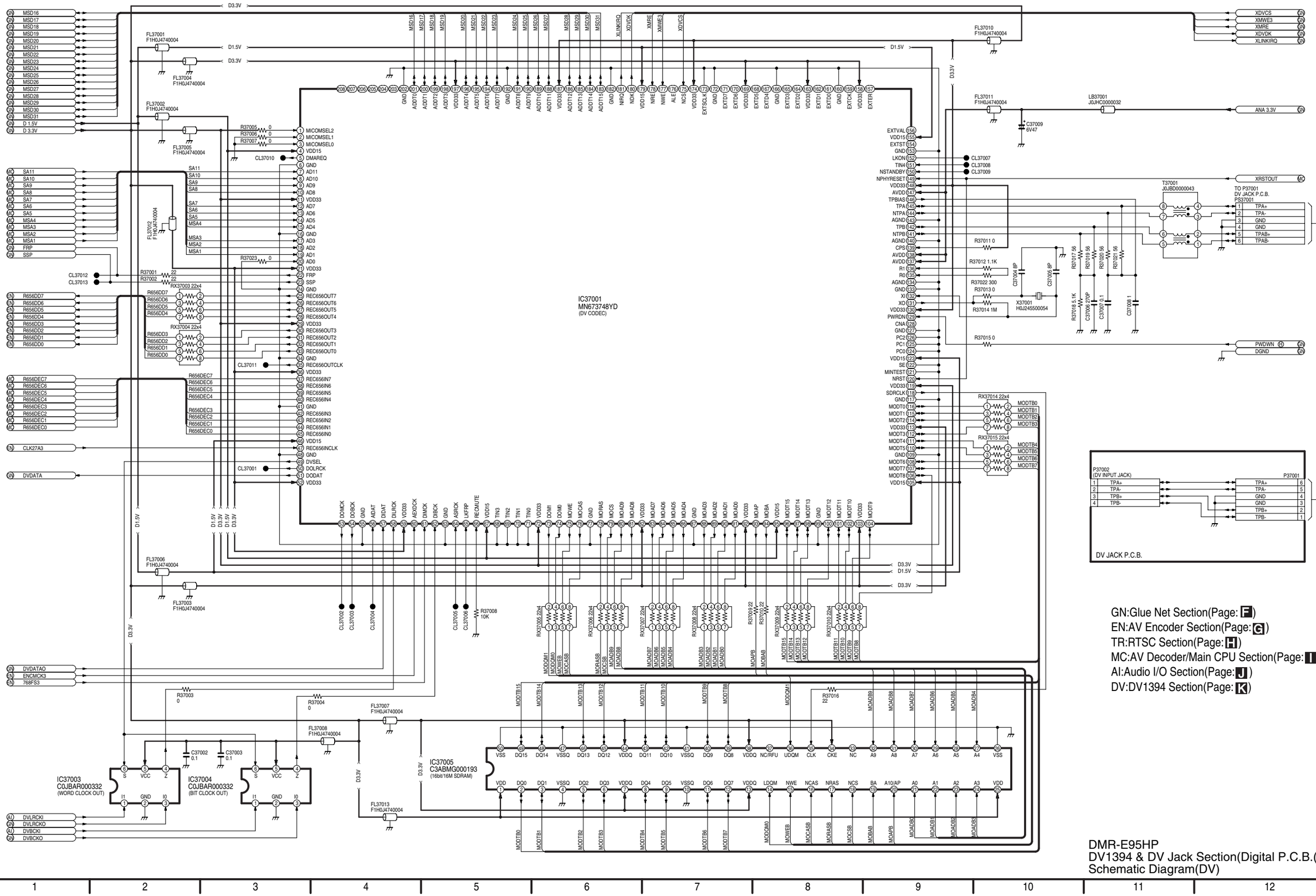
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

GN D 3.3V
GN DGND
LB4401 J0JGC0000020
R4420 0
R4421 0
R4422 0
R4451 0
R4452 0
C4432 0.1
R4450 0
R4453 5600
X1DA LP
DEC SCK
DEC SDTO
XDMUTE
XRESET
D4401 MA3Z142K0LG
EN 768FS1
R4419 0
R4418 0
C4411 10V10
C4412 6V47
C4433 16V10
C4434 0.1
C4421 1000P
C4422 1000P
C4423 1000P
C4424 1000P
C4425 1000P
C4426 1000P
IC4404
C0FBBK000035
(D/A CONVERTER)
SCK ML MCC MDI NC ZEROA VCOM AGND
BCK DATA LRCK DGND VDD VCC VOUTL VOUTR
IC4408
C0JBAD000107
(XD MUTE OUT)
VCC OUTY INB INA GND
R4457 0
IC4409
C0CBCBD00002
(REG.DAC+3.3V)
OUT GND NR
VIN GND ON
R4426 0
R4427 0
AMUTE
MIXROUT DM
MIXLOUT DM
R4423 0
R4424 0
R4425 0
FL4403 F1H0J4740004
LRCK
DMIX
DACBCK
LB4404 J0JGC0000020
FL4405 F1H0J4740004
LB4405 J0JHC0000032
GN AU 5V
C4415 0.1
C4416 6V330
C4417 0.1
C4418 6V100
C4414 0.1
C4413 6V100
LB4402 J0JGC0000020
FL4404 F1H0J4740004
LB4403 J0JGC0000020
R4438 47
R4439 0
ENCMCK2
ADDATA
R4454 0
R4455 0
ADBCK
DVBCKI
IC4406
C0FBAK000008
(A/D CONVERTER)
MODE1 MODE0 FMT1 FMT0 TEST SCKI VDD DGND DOUT BCK
VINL VINR VREF1 VREF2 VCC AGND XPDWN BYPAS FSYNC LRCK
IC4407
C0JBAA000257
(CLOCK OUT)
VCC OUTY INA INB GND
C4431 0.1
C4430 10V10
C4427 6V47
C4428 0.1
R4436 220
C4429 0.1
R4437 0
R4456 0
ADLRCK
DVLRCKI
R4428 0
R4434 0
AADC L
R4433 0
R4435 0
AADC R
GN XADC PD
GN AUGND

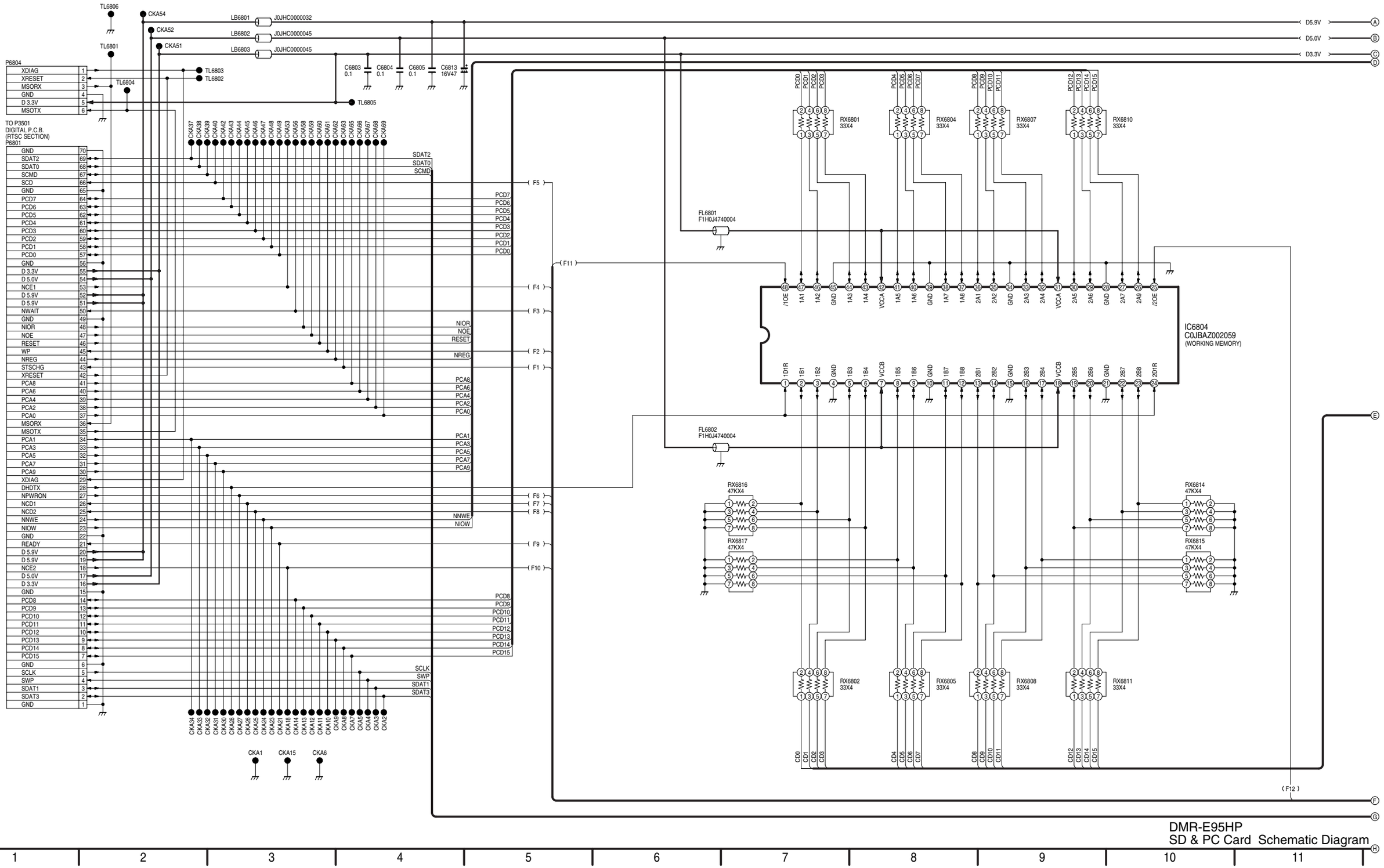
GN:Glue Net Section(Page: F)
EN:AV Encoder Section(Page: G)
TR:RTSC Section(Page: H)
MC:AV Decoder/Main CPU Section(Page: I)
AI:Audio I/O Section(Page: J)
DV:DV1394 Section(Page: K)

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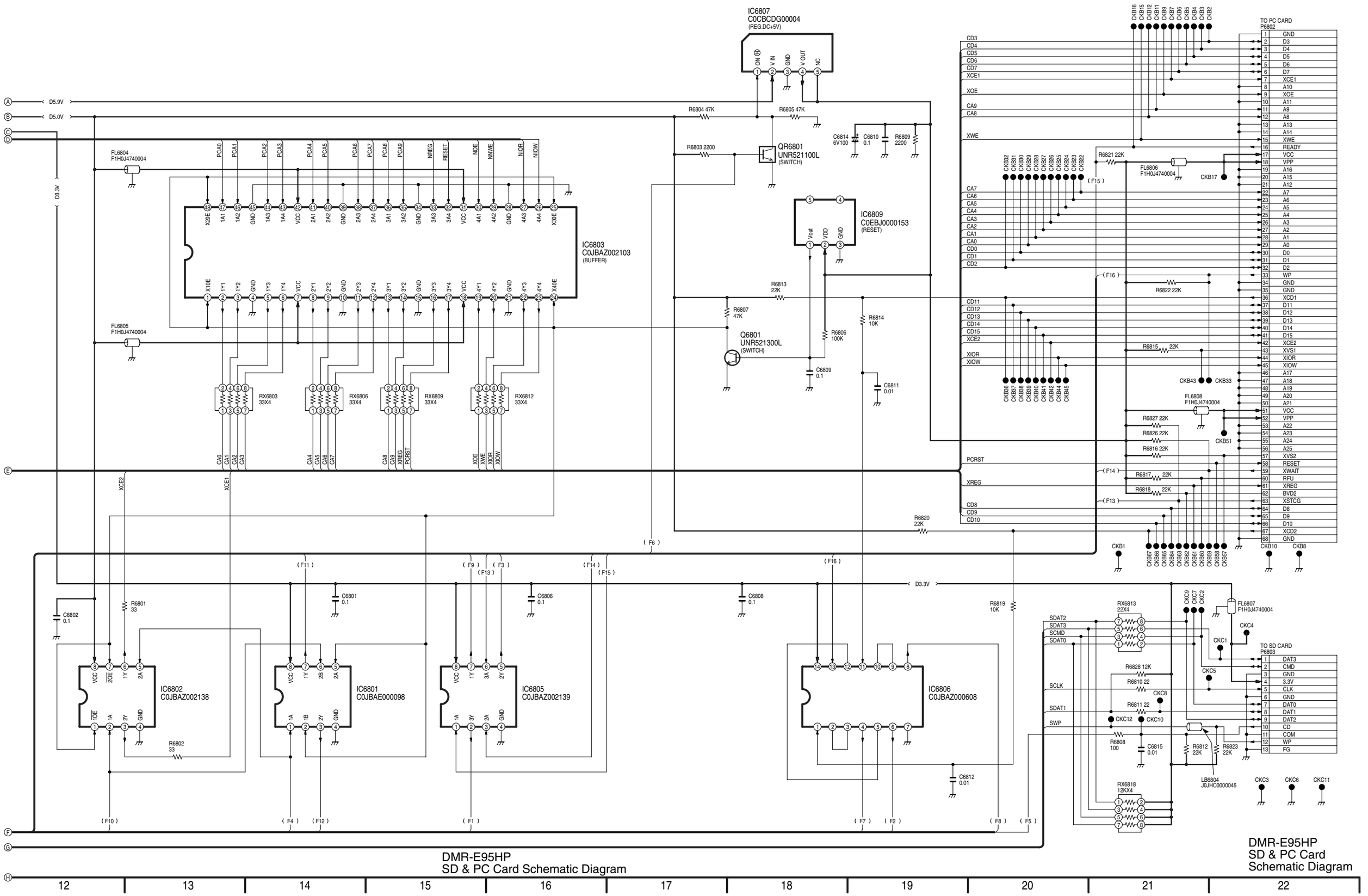
DMR-E95HP
Audio I/O Section(Digital P.C.B.(5/6))
Schematic Diagram(AI)

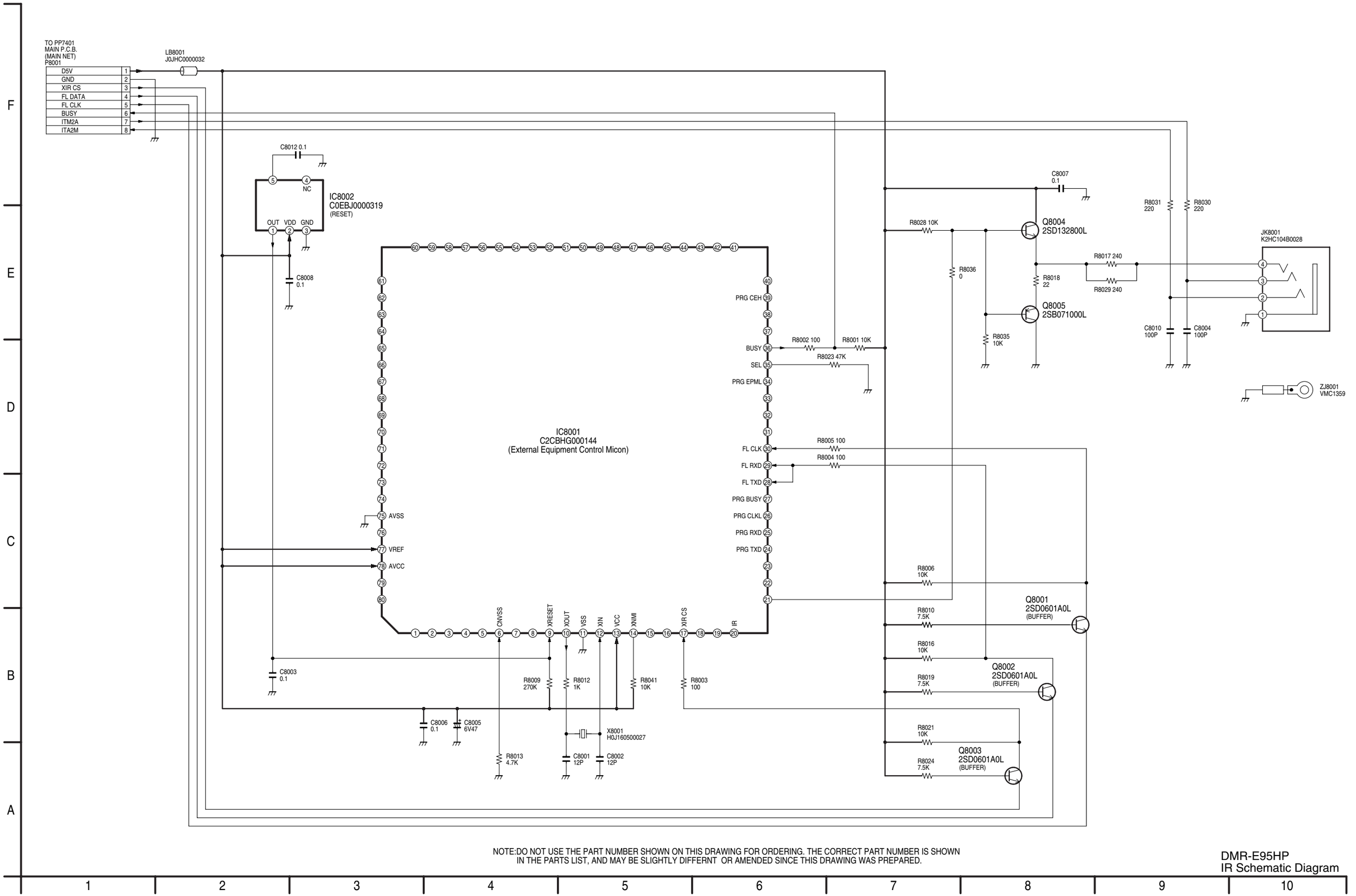



DMR-E95HP
DV1394 & DV Jack Section(Digital P.C.B.(6/6))
Schematic Diagram(DV)



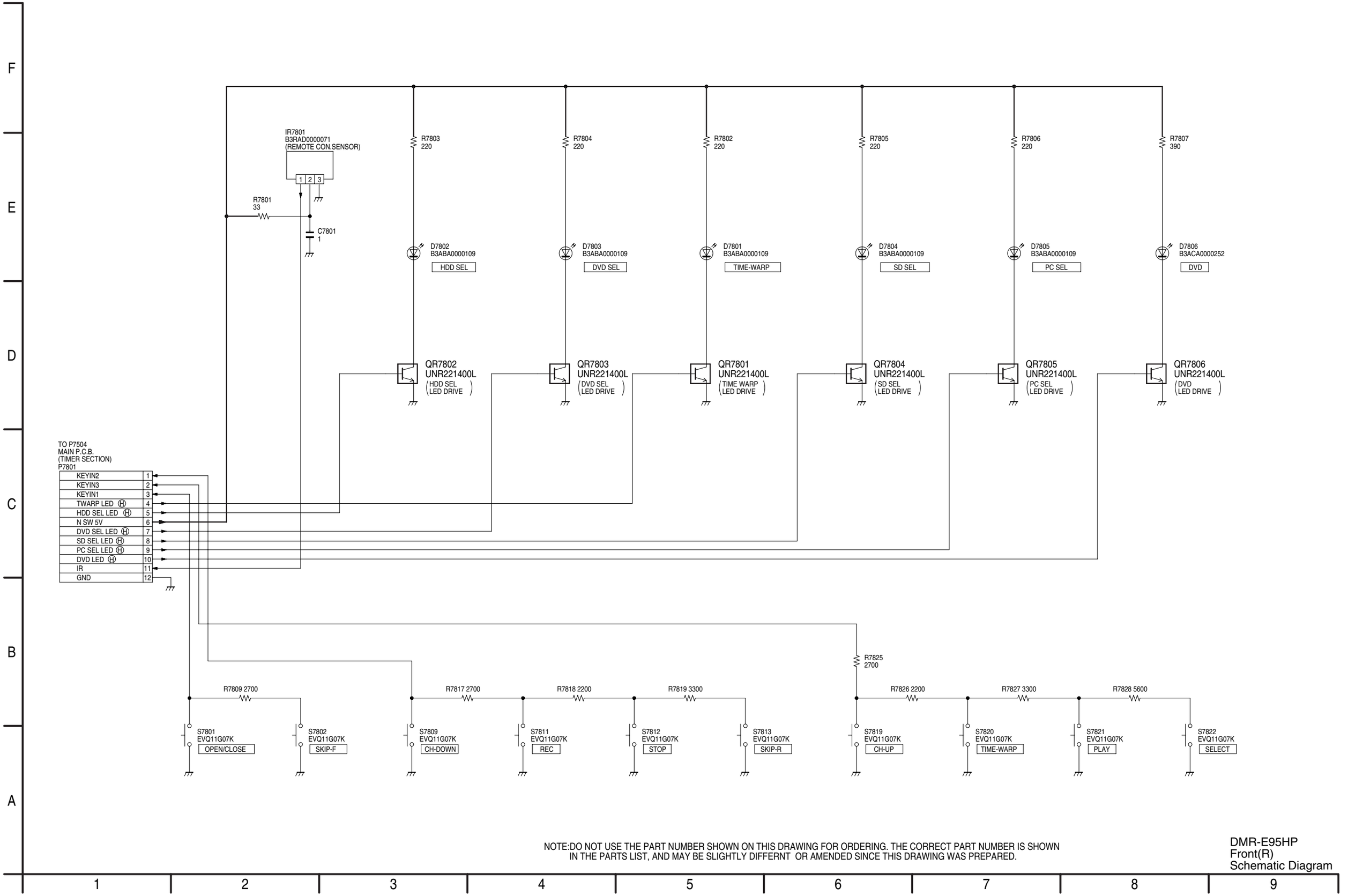

DMR-E95HP
SD & PC Card Schematic Diagram


IC6807
C0CBCDG00004
(REG.DC+5V)
ON
V IN
GND
V OUT
NC
D5.9V
D5.0V
D3.3V
R6804 47K
R6805 47K
R6803 2200
QR6801
UNR521100L
(SWITCH)
C6814
6V100
C6810
0.1
R6809
2200
IC6809
C0EBJ0000153
(RESET)
Vout
VDD
GND
FL6804
F1H0J4740004
FL6805
F1H0J4740004
IC6803
C0JBAZ002103
(BUFFER)
X20E
1A1
1A2
GND
1A3
1A4
VCC
2A1
2A2
GND
2A3
2A4
3A1
3A2
GND
3A3
3A4
VCC
4A1
4A2
GND
4A3
4A4
X30E
X10E
1Y1
1Y2
GND
1Y3
1Y4
VCC
2Y1
2Y2
GND
2Y3
2Y4
3Y1
3Y2
GND
3Y3
3Y4
VCC
4Y1
4Y2
GND
4Y3
4Y4
X40E
PCA0
PCA1
PCA2
PCA3
PCA4
PCA5
PCA6
PCA7
PCA8
PCA9
NREG
RESET
NOE
NWE
NIOR
NIOW
R6813
22K
R6807
47K
Q6801
UNR521300L
(SWITCH)
R6806
100K
R6814
10K
C6809
0.1
C6811
0.01
RX6803
33X4
RX6806
33X4
RX6809
33X4
RX6812
33X4
CA0
CA1
CA2
CA3
CA4
CA5
CA6
CA7
CA8
CA9
XREG
PCRST
XOE
XWE
XIOR
XIOW
XCE2
XCE1
R6820
22K
TO PC CARD
P6802
1 GND
2 D3
3 D4
4 D5
5 D6
6 D7
7 XCE1
8 A10
9 XOE
10 A11
11 A9
12 A8
13 A13
14 A14
15 XWE
16 READY
17 VCC
18 VPP
19 A16
20 A15
21 A12
22 A7
23 A6
24 A5
25 A4
26 A3
27 A2
28 A1
29 A0
30 D0
31 D1
32 D2
33 WP
34 GND
35 GND
36 XCD1
37 D11
38 D12
39 D13
40 D14
41 D15
42 XCE2
43 XVS1
44 XIOR
45 XIOW
46 A17
47 A18
48 A19
49 A20
50 A21
51 VCC
52 VPP
53 A22
54 A23
55 A24
56 A25
57 XVS2
58 RESET
59 XWAIT
60 RFU
61 XREG
62 BVD2
63 XSTCG
64 D8
65 D9
66 D10
67 XCD2
68 GND
CKB16
CKB15
CKB12
CKB11
CKB9
CKB7
CKB6
CKB5
CKB4
CKB3
CKB2
CD3
CD4
CD5
CD6
CD7
XCE1
XOE
CA9
CA8
XWE
R6821 22K
FL6806
F1H0J4740004
CKB17
CKB32
CKB31
CKB30
CKB29
CKB28
CKB27
CKB26
CKB25
CKB24
CKB23
CKB22
CA7
CA6
CA5
CA4
CA3
CA2
CA1
CA0
CD0
CD1
CD2
CD11
CD12
CD13
CD14
CD15
XCE2
XIOR
XIOW
CKB36
CKB37
CKB38
CKB39
CKB40
CKB41
CKB42
CKB44
CKB45
R6822 22K
R6815 22K
CKB43
CKB33
FL6808
F1H0J4740004
R6827 22K
R6826 22K
R6816 22K
CKB51
PCRST
XREG
CD8
CD9
CD10
R6817 22K
R6818 22K
CKB1
CKB67
CKB66
CKB65
CKB64
CKB63
CKB62
CKB61
CKB60
CKB59
CKB58
CKB57
CKB10
CKB8
C6802
0.1
R6801
33
C6801
0.1
C6806
0.1
C6808
0.1
R6819
10K
IC6802
C0JBAZ002138
VCC
2OE
1Y
2A
1OE
1A
2Y
GND
R6802
33
IC6801
C0JBAE000098
VCC
1Y
2B
2A
1A
1B
2Y
GND
IC6805
C0JBAZ002139
VCC
1Y
3A
2Y
1A
3Y
2A
GND
IC6806
C0JBAZ000608
C6812
0.01
RX6813
22X4
SDAT2
SDAT3
SCMD
SDAT0
SCLK
SDAT1
SWP
R6828 12K
R6810 22
R6811 22
R6808
100
C6815
0.01
R6812
22K
R6823
22K
RX6818
12KX4
FL6807
F1H0J4740004
CKC9
CKC7
CKC2
CKC4
CKC1
CKC5
CKC8
CKC12
CKC10
TO SD CARD
P6803
1 DAT3
2 CMD
3 GND
4 3.3V
5 CLK
6 GND
7 DAT0
8 DAT1
9 DAT2
10 CD
11 COM
12 WP
13 FG
LB6804
J0JHC0000045
CKC3
CKC6
CKC11
( F1 )
( F2 )
( F3 )
( F4 )
( F5 )
( F6 )
( F7 )
( F8 )
( F9 )
( F10 )
( F11 )
( F12 )
( F13 )
( F14 )
( F15 )
( F16 )
DMR-E95HP
SD & PC Card Schematic Diagram
12
13
14
15
16
17
18
19
20
21
22



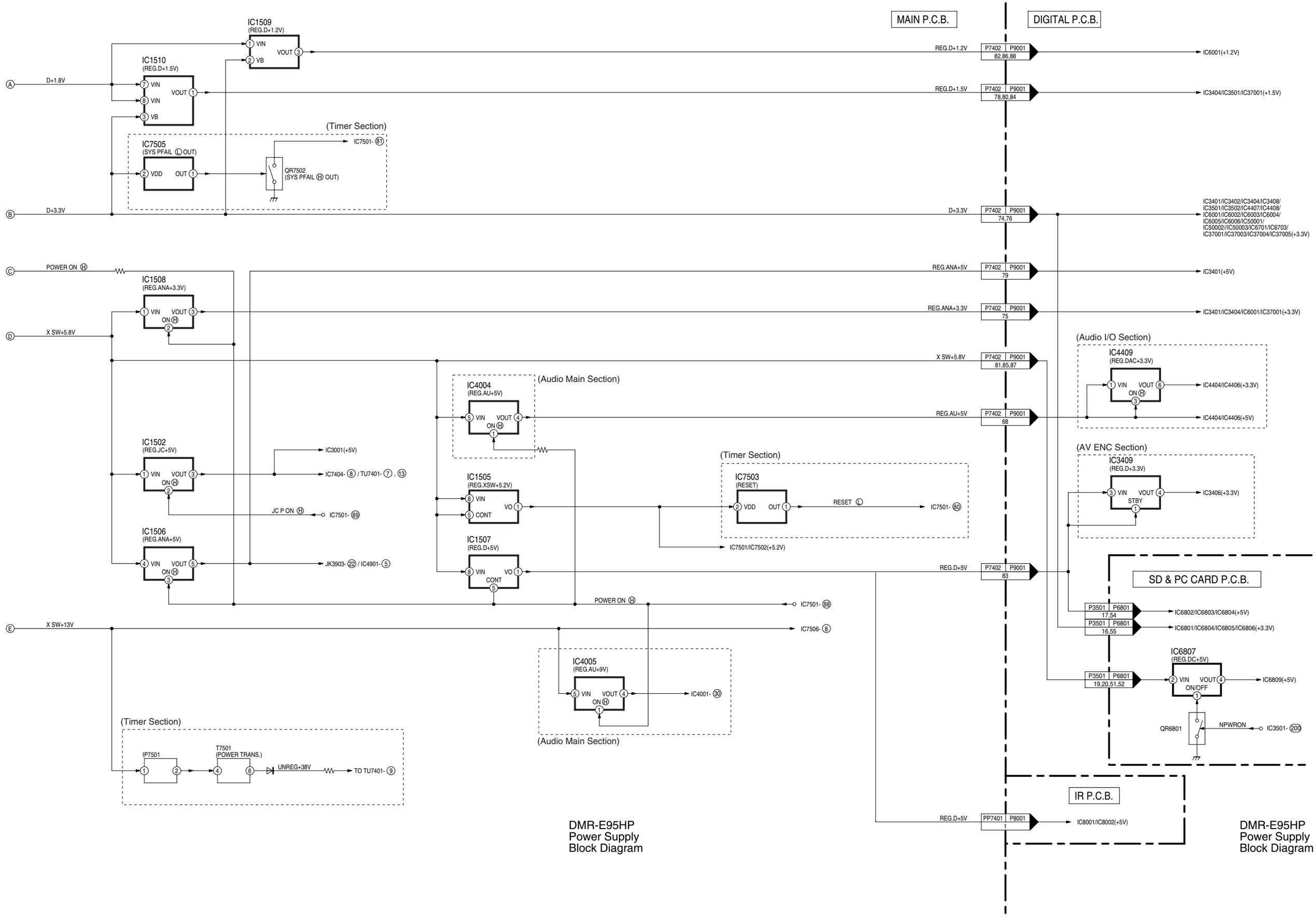

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E95HP
IR Schematic Diagram




NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E95HP
Front(R)
Schematic Diagram




DMR-E95HP
Power Supply
Block Diagram

DMR-E95HP
Power Supply
Block Diagram

:REC SIGNAL :PB SIGNAL

IC3001
(VIDEO PROCESSOR)

FROM DIGITAL BLOCK SECTION

P9001 P7402 18 COUT DM → 41 DVD C IN → BIAS → 6M LPF → 75 → C75 OUT 30 → CPN C OUT
P9001 P7402 22 YOUT DM → 29 DVD Y IN → CLAMP → 6M LPF → DRV MIX → 75 → V75 OUT 28 → CPS V OUT
V75 SAG 29
P9001 P7402 26 GPY YOUT DM → 47 DVD G/Py IN → SW1 → BIAS / CLAMP
SW1 → 6M LPF → 12M LPF → SW2 → Py/G SW → 75 → Y75 OUT 26 → CPN Y OUT
Y75 SAG 27
Py/G OUT 37 → GPC Y OUT
Py/G SAG 36
P9001 P7402 30 BPB CBOUT DM → 51 DVD B/Pb IN → BIAS → 6M LPF → Pb/B SW → 75 → Pb/B OUT 33 → BPC B OUT
Pb/B SAG 32
P9001 P7402 34 RPR CROUT DM → 49 DVD R/Pr IN → BIAS → 6M LPF → Pr/R/C SW → 75 → Pr/R/C OUT 35 → RPC R OUT
Pr/R/C SAG 34

FROM/TO DIGITAL GLUE SECTION

P9001 P7402 19 IIC DATA ↔ 57 SDA
P9001 P7402 21 IIC CLOCK ↔ 58 SCL

16 S1/S2 DET3
23 S1/S2 DET1
9 S1/S2 DET2
→ I²C-BUS CONTROL → DET OUT A 8 → L123 SWIDE → IC7501- 99
S1/S2 OUT 31

JK3902
A/V OUT JACK
13 VIDEO1 / 14 VIDEO2 — LINE OUT
9 Y / 10 C — S1/S2 OUT 1
3 Y / 4 C — S1/S2 OUT 2

JK3903
COMPONENT VIDEO OUT (480P/480I)
20 Y(GREEN)
19 PB/CB (BLUE)
18 PR/CR (RED)

TU7401
U/V TUNER PACK
VIDEO OUT 18 → Q7401 AMP → TU V IN → 3 TUNER → CLAMP

JK3901
A/V IN JACK
L3 VIDEO IN 14 → LINE 3V IN → 12 VIDEO3 IN → CLAMP
L1 VIDEO IN 13 → LINE 1V IN → 19 VIDEO1 IN → CLAMP
C 4 → CPN 3C IN → 17 C3 IN → BIAS
Y 3 → CPN 3Y IN → 14 Y3 IN → CLAMP
L3 S-VIDEO IN 6 → C/S DET3 → 13 C/S DET3
C 10 → CPN 1C IN → 24 C1 IN → BIAS
Y 9 → CPN 1Y IN → 21 Y1 IN → CLAMP
L1 S-VIDEO IN 11 → C/S DET1 → 20 C/S DET1

V-SW A → MIX A
SW A (V / Y) → MIX A
Y-SW A → MIX A

JK3904
FRONT A/V IN JACK
L2 VIDEO IN 7 → LINE 2V IN → 5 VIDEO2 IN → CLAMP
C 12 → CPN 2C IN → 10 C2 IN → BIAS
Y 11 → CPN 2Y IN → 7 Y2 IN → CLAMP
L2 S-VIDEO IN 6 → C/S DET2 → 6 C/S DET2

C-SW A

SLICER VIDEO A 67 ← 0/6dB
Q7507 AMP → IC7501- 109 , 113

0dB COUT A 69 → CPNCIN DM → P7402 P9001 1
0dB Y/V OUT A 65 → V YIN DM → P7402 P9001 2
→ TO DIGITAL BLOCK SECTION

DMR-E95HP
Analog Video
Block Diagram

:REC SIGNAL  :PB SIGNAL

IC4001
(AUDIO SOUND PROCESSOR)

TU7401
U/V TUNER PACK
L OUT 27
R OUT 26
TUNER L
TUNER R
TUIL 2
TUIR 3
0.8,12dB

JK3901
A/V IN JACK
AUDIO
LINE IN L 16
JSB IN L 17
LINE IN R 19
JSB IN R 20
L1 IN L
L3 IN L
L1 IN R
L3 IN R
EXT21 11
EXT31 13
EXT22 12
EXT32 14

JK3904
FRONT A/V IN JACK
AUDIO
L 5
2
R 3
L2 IN L
L2 IN R
FRONT1 32
FRONT2 31

I²C BUS LOGIC
SCL 20
SDA 21
17
IIC CLOCK
IIC DATA
P7402 P9001 21
P7402 P9001 19
TO/FROM DIGITAL P.C.B. GLUE SECTION

INPUT SELECTOR
-6.1dB
0.5dB
OUTL 29
OUTR 28
AADC L
AADC R
P7402 P9001 50
P7402 P9001 48
TO DIGITAL BLOCK SECTION

FROM DIGITAL BLOCK SECTION
P9001 P7402 62 MIXLOUT DM
P9001 P7402 58 MIXROUT DM
DAR 25
DAL 26
RFOUT 24
LS 27

IC4901
(DIGITAL AUDIO OUT)
P9001 P7402 72 IECOUT
2
4
IEC OUT
JK3903
DIGITAL AUDIO OUT
23
OPTICAL

JK3902
A/V OUT JACK
MIX L OUT1
MIX L OUT2
MIX R OUT1
MIX R OUT2
16 OUT1-L
17 OUT2-L
19 OUT1-R
20 OUT2-R
LINE

IC7501- 20 XTMUTE
QR4001,4004 SWITCH
FROM DIGITAL P.C.B. AUDIO I/O SECTION
P9001 P7402 70 XDMUTE
QR4002,4003 SWITCH
Q4001 MUTE
(5V)
D4001
D4002
Q4002 MUTE
Q4003 MUTE
Q4004 MUTE
Q4005 MUTE

DMR-E95HP
Analog Audio
Block Diagram

FRONT(R)P.C.B.

S7819 CH-UP
S7820 TIME-WARP
S7821 PLAY
S7822 SELECT
S7809 CH-DOWN
S7811 REC
S7812 STOP
S7813 SKIP-R
S7801 OPEN/CLOSE
S7802 SKIP-F
POWER S7501

IR7801 REMOTE CTL. SENSOR

N SW+5V

HDD D7512 Q7520 (LED DRIVE)

N SW+5V
TIME-WARP D7801 QR7801 (LED DRIVE)
HDD SEL D7802 QR7802 (LED DRIVE)
DVD D7806 QR7806 (LED DRIVE)
DVD SEL D7803 QR7803 (LED DRIVE)
SD SEL D7804 QR7804 (LED DRIVE)
PC SEL D7805 QR7805 (LED DRIVE)

X SW+5.2V D7507 D7511 B7501 BACK UP BATTERY

P7801 P7504 2 — 104 KEY IN3
P7801 P7504 1 — 67 KEY IN2
P7801 P7504 3 — 96 KEY IN1
P7801 P7504 11 — 2 IR
78 HDD LED
P7801 P7504 4 — 74 TIME WARP LED
P7801 P7504 5 — 73 HDD SEL LED
P7801 P7504 10 — 65 DVD LED R
P7801 P7504 7 — 70 DVD SEL LED
P7801 P7504 8 — 68 SD SEL LED
P7801 P7504 9 — 67 PC SEL LED
69 VCC

IC7501 (TIMER)

IC7503 (RESET)
XSW +5.2V — 2 VDD OUT 1 — 80 P FAIL Ⓛ

IC7502 (DISPLAY DRIVE)
FL RESET 84 — 1 RESET
FL CS 87 — 2 CS
FL CLK 6 — 3 SCK
FL TXD 4 — 4 SDATA
FL RXD 5
DIG00 63 · · DIG07 56
SEG00 44 · · SEG09 35
SEG19 25 · · SEG25 19
SEG26 17 · · SEG31 12
SEG35 45 · · SEG41 51

DIG00-DIG07
SEG00-SEG41
DP7501 FIP DISPLAY
F+ F-
T7501 1 DISPLAY HEATER POWER SWITCHING TRANSFORMER 5 4

XSW+5.2V
FILAMENT ON Ⓛ 49 — QR7507
Q7517 FIP CONTROL

X SW13V
IP7501 1 IC PROTECTOR 2

IC7506 (FAN MOTOR DRIVE)
FAN PWM OUT 23 — 5 B+IN A OUT 1
Q7512 (FAN MOTOR SWITCH)
FANPWM — P7503 1 / P7503 3 — FAN MOTOR M
FAN LOCK 24

POWER ON Ⓗ 88 — POWER ON Ⓗ
DR P ON Ⓗ 86 — DR P ON Ⓗ
JC P ON Ⓗ 89 — JC P ON Ⓗ
SYS PFAIL Ⓗ 81 — SYS PFAIL Ⓗ
HDD PFAIL Ⓛ 75 — HDD PFAIL Ⓛ
TO/FROM POWER BLOCK SECTION

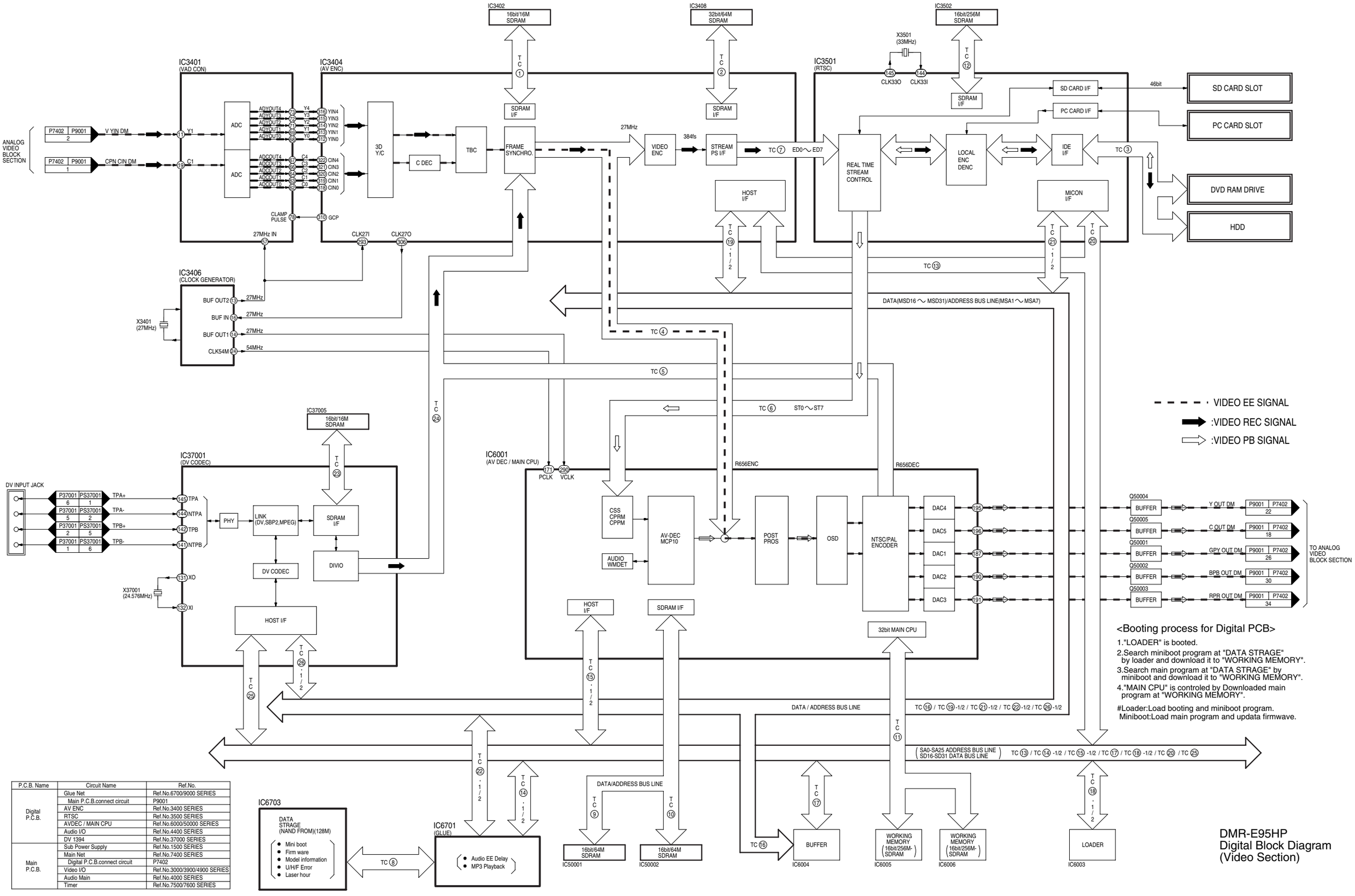
X IN 14 — X7501 10MHz (MAIN CLK) — X OUT 12
XC IN 9 — X7502 32.768KHz (REAL TIME CLK) — XC OUT 10

XT MUTE 20 — XT MUTE
TO AUDIO BLOCK SECTION

SYNC IN 109 — SLICER VIDEO
CV IN 113
FROM VIDEO BLOCK SECTION

L1 SWIDE 99 — L123 SWIDE

DMR-E95HP
Analog Timer
Block Diagram



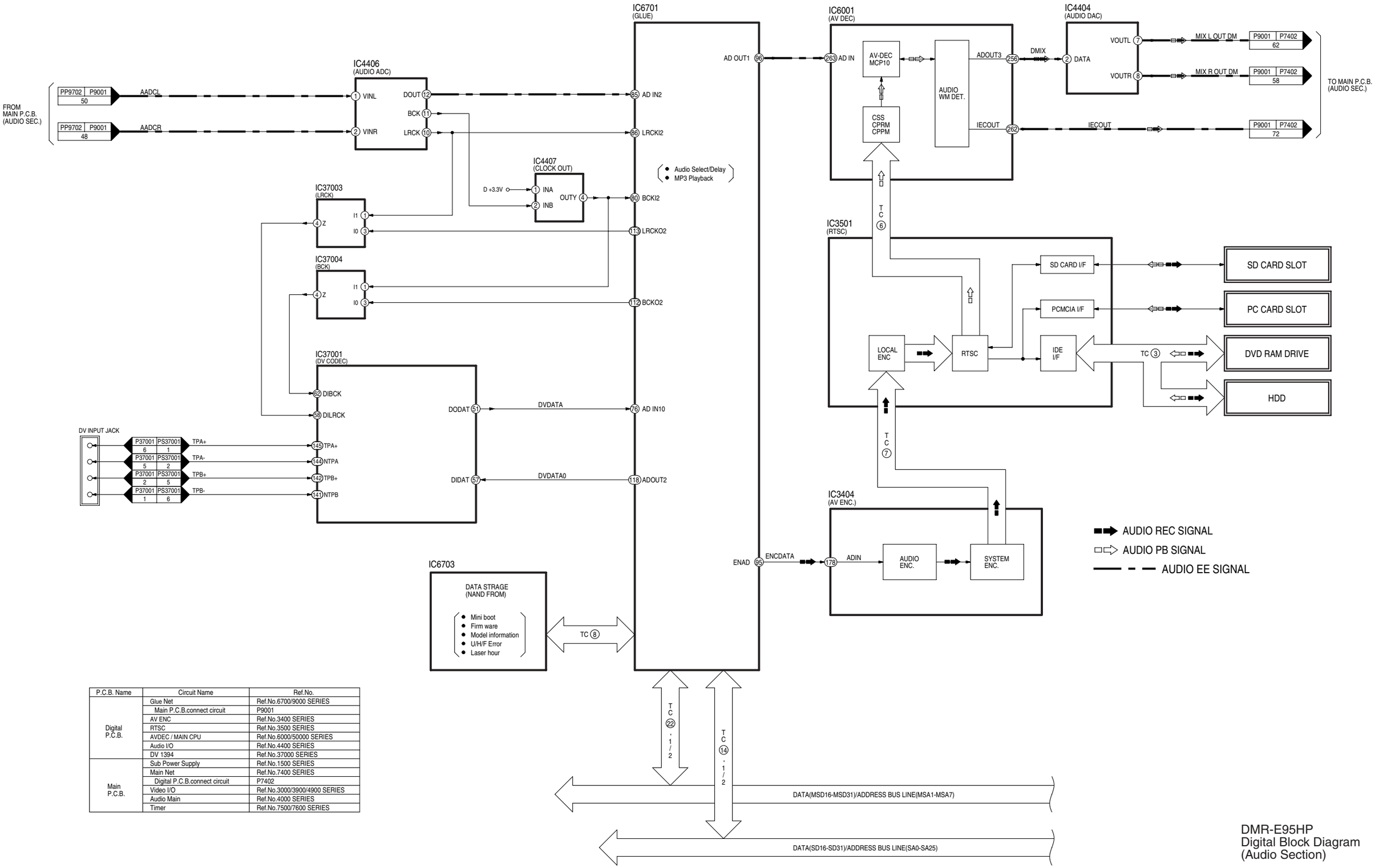

| P.C.B. Name | Circuit Name | Ref.No. |
|---|---|---|
| Digital P.C.B. | Glue Net | Ref.No.6700/9000 SERIES |
| | Main P.C.B.connect circuit | P9001 |
| | AV ENC | Ref.No.3400 SERIES |
| | RTSC | Ref.No.3500 SERIES |
| | AVDEC / MAIN CPU | Ref.No.6000/50000 SERIES |
| | Audio I/O | Ref.No.4400 SERIES |
| | DV 1394 | Ref.No.37000 SERIES |
| Main P.C.B. | Sub Power Supply | Ref.No.1500 SERIES |
| | Main Net | Ref.No.7400 SERIES |
| | Digital P.C.B.connect circuit | P7402 |
| | Video I/O | Ref.No.3000/3900/4900 SERIES |
| | Audio Main | Ref.No.4000 SERIES |
| | Timer | Ref.No.7500/7600 SERIES |

### <Booting process for Digital PCB>

1."LOADER" is booted.
2.Search miniboot program at "DATA STRAGE" by loader and download it to "WORKING MEMORY".
3.Search main program at "DATA STRAGE" by miniboot and download it to "WORKING MEMORY".
4."MAIN CPU" is controled by Downloaded main program at "WORKING MEMORY".

#Loader:Load booting and miniboot program.
Miniboot:Load main program and updata firmwave.

# DMR-E95HP Digital Block Diagram (Video Section)




| P.C.B. Name | Circuit Name | Ref.No. |
|---|---|---|
| Digital P.C.B. | Glue Net | Ref.No.6700/9000 SERIES |
| | Main P.C.B.connect circuit | P9001 |
| | AV ENC | Ref.No.3400 SERIES |
| | RTSC | Ref.No.3500 SERIES |
| | AVDEC / MAIN CPU | Ref.No.6000/50000 SERIES |
| | Audio I/O | Ref.No.4400 SERIES |
| | DV 1394 | Ref.No.37000 SERIES |
| Main P.C.B. | Sub Power Supply | Ref.No.1500 SERIES |
| | Main Net | Ref.No.7400 SERIES |
| | Digital P.C.B.connect circuit | P7402 |
| | Video I/O | Ref.No.3000/3900/4900 SERIES |
| | Audio Main | Ref.No.4000 SERIES |
| | Timer | Ref.No.7500/7600 SERIES |

DMR-E95HP
Digital Block Diagram
(Audio Section)

# IC Pin Terminal Chart ( TC 1 - TC 8 )

| TC | IC3404 / AVENC | | SIGNAL NAME | IC3402 / SDRAM | |
|---|---|---|---|---|---|
| | Port Name | Pin No | | Pin No | Port Name |
| 1 | ARDQ0 | 334 | MADQB0 | 2 | DQ0 |
| | ARDQ1 | 335 | MADQB1 | 3 | DQ1 |
| | ARDQ2 | 336 | MADQB2 | 5 | DQ2 |
| | ARDQ3 | 2 | MADQB3 | 6 | DQ3 |
| | ARDQ4 | 4 | MADQB4 | 8 | DQ4 |
| | ARDQ5 | 5 | MADQB5 | 9 | DQ5 |
| | ARDQ6 | 7 | MADQB6 | 11 | DQ6 |
| | ARDQ7 | 9 | MADQB7 | 12 | DQ7 |
| | ARDQ8 | 16 | MADQB8 | 39 | DQ8 |
| | ARDQ9 | 17 | MADQB9 | 40 | DQ9 |
| | ARDQ10 | 19 | MADQB10 | 42 | DQ10 |
| | ARDQ11 | 20 | MADQB11 | 43 | DQ11 |
| | ARDQ12 | 22 | MADQB12 | 45 | DQ12 |
| | ARDQ13 | 23 | MADQB13 | 46 | DQ13 |
| | ARDQ14 | 25 | MADQB14 | 48 | DQ14 |
| | ARDQ15 | 26 | MADQB15 | 49 | DQ15 |
| | ARA0 | 28 | MAB0 | 21 | A0 |
| | ARA1 | 29 | MAB1 | 22 | A1 |
| | ARA2 | 31 | MAB2 | 23 | A2 |
| | ARA3 | 32 | MAB3 | 24 | A3 |
| | ARA4 | 34 | MAB4 | 27 | A4 |
| | ARA5 | 35 | MAB5 | 28 | A5 |
| | ARA6 | 37 | MAB6 | 29 | A6 |
| | ARA7 | 38 | MAB7 | 30 | A7 |
| | ARA8 | 41 | MAB8 | 31 | A8 |
| | ARA9 | 42 | MAB9 | 32 | A9 |
| | ARA10 | 44 | MAB10 | 20 | A10 |
| | ARA11 | 45 | BAOS D | 19 | A11 |

| TC | IC3404 / AV ENC | | SIGNAL NAME | IC3408 / SDRAM | |
|---|---|---|---|---|---|
| | Port Name | Pin No | | Pin No | Port Name |
| 2 | MDQ0 | 88 | MDQA0 | 2 | DQ0 |
| | MDQ1 | 89 | MDQA1 | 4 | DQ1 |
| | MDQ2 | 91 | MDQA2 | 5 | DQ2 |
| | MDQ3 | 92 | MDQA3 | 7 | DQ3 |
| | MDQ4 | 93 | MDQA4 | 8 | DQ4 |
| | MDQ5 | 95 | MDQA5 | 10 | DQ5 |
| | MDQ6 | 96 | MDQA6 | 11 | DQ6 |
| | MDQ7 | 97 | MDQA7 | 13 | DQ7 |
| | MDQ8 | 99 | MDQA8 | 74 | DQ8 |
| | MDQ9 | 100 | MDQA9 | 76 | DQ9 |
| | MDQ10 | 101 | MDQA10 | 77 | DQ10 |
| | MDQ11 | 103 | MDQA11 | 79 | DQ11 |
| | MDQ12 | 104 | MDQA12 | 80 | DQ12 |
| | MDQ13 | 105 | MDQA13 | 82 | DQ13 |
| | MDQ14 | 108 | MDQA14 | 83 | DQ14 |
| | MDQ15 | 109 | MDQA15 | 85 | DQ15 |
| | MDQ16 | 115 | MDQA16 | 31 | DQ16 |
| | MDQ17 | 116 | MDQA17 | 33 | DQ17 |
| | MDQ18 | 118 | MDQA18 | 34 | DQ18 |
| | MDQ19 | 119 | MDQA19 | 36 | DQ19 |
| | MDQ20 | 120 | MDQA20 | 37 | DQ20 |
| | MDQ21 | 122 | MDQA21 | 39 | DQ21 |
| | MDQ22 | 123 | MDQA22 | 40 | DQ22 |
| | MDQ23 | 124 | MDQA23 | 42 | DQ23 |
| | MDQ24 | 127 | MDQA24 | 45 | DQ24 |
| | MDQ25 | 128 | MDQA25 | 47 | DQ25 |
| | MDQ26 | 129 | MDQA26 | 48 | DQ26 |
| | MDQ27 | 131 | MDQA27 | 50 | DQ27 |
| | MDQ28 | 132 | MDQA28 | 51 | DQ28 |
| | MDQ29 | 133 | MDQA29 | 53 | DQ29 |
| | MDQ30 | 135 | MDQA30 | 54 | DQ30 |
| | MDQ31 | 136 | MDQA31 | 56 | DQ31 |
| | MA0 | 147 | MAA0 | 25 | A0 |
| | MA1 | 148 | MAA1 | 26 | A1 |
| | MA2 | 149 | MAA2 | 27 | A2 |
| | MA3 | 152 | MAA3 | 60 | A3 |
| | MA4 | 153 | MAA4 | 61 | A4 |
| | MA5 | 154 | MAA5 | 62 | A5 |
| | MA6 | 156 | MAA6 | 63 | A6 |
| | MA7 | 157 | MAA7 | 64 | A7 |
| | MA8 | 158 | MAA8 | 65 | A8 |
| | MA9 | 160 | MAA9 | 66 | A9 |
| | MA10 | 161 | MAA10 | 24 | A10 |

| TC | IC3501 / RTSC | | SIGNAL NAME | FP3501 (TO | DVD RAM&HDD |
|---|---|---|---|---|---|
| | Port Name | Pin No | | Pin No | Port Name |
| 3 | IHDD0 | 251 | RAMD0 | 24 | DD0 |
| | IHDD1 | 250 | RAMD1 | 26 | DD1 |
| | IHDD2 | 249 | RAMD2 | 28 | DD2 |
| | IHDD3 | 248 | RAMD3 | 30 | DD3 |
| | IHDD4 | 246 | RAMD4 | 32 | DD4 |
| | IHDD5 | 245 | RAMD5 | 34 | DD5 |
| | IHDD6 | 244 | RAMD6 | 36 | DD6 |
| | IHDD7 | 243 | RAMD7 | 38 | DD7 |
| | IHDD8 | 239 | RAMD8 | 37 | DD8 |
| | IHDD9 | 238 | RAMD9 | 35 | DD9 |
| | IHDD10 | 237 | RAMD10 | 33 | DD10 |
| | IHDD11 | 236 | RAMD11 | 31 | DD11 |
| | IHDD12 | 235 | RAMD12 | 29 | DD12 |
| | IHDD13 | 233 | RAMD13 | 27 | DD13 |
| | IHDD14 | 232 | RAMD14 | 25 | DD14 |
| | IHDD15 | 231 | RAMD15 | 23 | DD15 |

| TC | IC3404 / AVENC | | SIGNAL NAME | IC6001 / AV DEC&MAIN CPU | |
|---|---|---|---|---|---|
| | Port Name | Pin No | | Pin No | Port Name |
| 4 | R656OUT0 | 296 | R656ENC0 | 278 | VDIN0 |
| | R656OUT1 | 297 | R656ENC1 | 277 | VDIN1 |
| | R656OUT2 | 298 | R656ENC2 | 272 | VDIN2 |
| | R656OUT3 | 299 | R656ENC3 | 271 | VDIN3 |
| | R656OUT4 | 301 | R656ENC4 | 270 | VDIN4 |
| | R656OUT5 | 302 | R656ENC5 | 269 | VDIN5 |
| | R656OUT6 | 303 | R656ENC6 | 268 | VDIN6 |
| | R656OUT7 | 304 | R656ENC7 | 266 | VDIN7 |

| TC | IC6001/AV DEC&MAIN CPU | | SIGNAL NAME | IC3404 / AV ENC | |
|---|---|---|---|---|---|
| | Port Name | Pin No | | Pin No | Port Name |
| 5 | VDOUT0 | 289 | R656DD0 | 283 | REC656IN0 |
| | VDOUT1 | 288 | R656DD1 | 284 | REC656IN1 |
| | VDOUT2 | 286 | R656DD2 | 285 | REC656IN2 |
| | VDOUT3 | 285 | R656DD3 | 286 | REC656IN3 |
| | VDOUT4 | 284 | R656DD4 | 288 | REC656IN4 |
| | VDOUT5 | 283 | R656DD5 | 289 | REC656IN5 |
| | VDOUT6 | 282 | R656DD6 | 290 | REC656IN6 |
| | VDOUT7 | 281 | R656DD7 | 291 | REC656IN7 |

| TC | IC3501 / RTSC | | SIGNAL NAME | IC6001/AV DEC&MAIN CPU | |
|---|---|---|---|---|---|
| | Port Name | Pin No | | Pin No | Port Name |
| 6 | B3DATA0 | 46 | STD0 | 251 | STD0 |
| | B3DATA1 | 47 | STD1 | 250 | STD1 |
| | B3DATA2 | 48 | STD2 | 249 | STD2 |
| | B3DATA3 | 49 | STD3 | 248 | STD3 |
| | B3DATA4 | 53 | STD4 | 247 | STD4 |
| | B3DATA5 | 54 | STD5 | 245 | STD5 |
| | B3DATA6 | 55 | STD6 | 244 | STD6 |
| | B3DATA7 | 56 | STD7 | 243 | STD7 |

| TC | IC3404 / AVENC | | SIGNAL NAME | IC3501 / RTSC | |
|---|---|---|---|---|---|
| | Port Name | Pin No | | Pin No | Port Name |
| 7 | CD0 | 229 | ED0 | 27 | B2DATA0 |
| | CD1 | 230 | ED1 | 28 | B2DATA1 |
| | CD2 | 231 | ED2 | 30 | B2DATA2 |
| | CD3 | 233 | ED3 | 31 | B2DATA3 |
| | CD4 | 234 | ED4 | 33 | B2DATA4 |
| | CD5 | 235 | ED5 | 34 | B2DATA5 |
| | CD6 | 238 | ED6 | 36 | B2DATA6 |
| | CD7 | 239 | ED7 | 37 | B2DATA7 |

| TC | IC6701 / GLUE | | SIGNAL NAME | IC6703 / DATA STRAGE | |
|---|---|---|---|---|---|
| | Port Name | Pin No | | Pin No | Port Name |
| 8 | ECCD0 | 67 | DE0 | 29 | D0 |
| | ECCD1 | 70 | DE1 | 30 | D1 |
| | ECCD2 | 69 | DE2 | 31 | D2 |
| | ECCD3 | 68 | DE3 | 32 | D3 |
| | ECCD4 | 71 | DE4 | 41 | D4 |
| | ECCD5 | 74 | DE5 | 42 | D5 |
| | ECCD6 | 73 | DE6 | 43 | D6 |
| | ECCD7 | 72 | DE7 | 44 | D7 |

# IC Pin Terminal Chart ( TC9 - TC12 )

| TC | IC6001 / AV DEC&MAIN CPU | | SIGNAL NAME | IC50001 / SDRAM | |
|---|---|---|---|---|---|
| | Port Name | Pin No | | Pin No | Port Name |
| 9 | MDQM0 | 343 | DQ0 | 2 | DQ0 |
| | MDQM1 | 346 | DQ1 | 4 | DQ1 |
| | MDQM2 | 348 | DQ2 | 5 | DQ2 |
| | MDQM3 | 350 | DQ3 | 7 | DQ3 |
| | MDQM4 | 353 | DQ4 | 8 | DQ4 |
| | MDQM5 | 355 | DQ5 | 10 | DQ5 |
| | MDQM6 | 358 | DQ6 | 11 | DQ6 |
| | MDQM7 | 360 | DQ7 | 13 | DQ7 |
| | MDQM8 | 359 | DQ8 | 42 | DQ8 |
| | MDQM9 | 356 | DQ9 | 44 | DQ9 |
| | MDQM10 | 354 | DQ10 | 45 | DQ10 |
| | MDQM11 | 352 | DQ11 | 47 | DQ11 |
| | MDQM12 | 349 | DQ12 | 48 | DQ12 |
| | MDQM13 | 347 | DQ13 | 50 | DQ13 |
| | MDQM14 | 344 | DQ14 | 51 | DQ14 |
| | MDQM15 | 342 | DQ15 | 53 | DQ15 |
| | MAM0 | 317 | A0 | 23 | A0 |
| | MAM1 | 320 | A1 | 24 | A1 |
| | MAM2 | 322 | A2 | 25 | A2 |
| | MAM3 | 328 | A3 | 26 | A3 |
| | MAM4 | 330 | A4 | 29 | A4 |
| | MAM5 | 332 | A5 | 30 | A5 |
| | MAM6 | 331 | A6 | 31 | A6 |
| | MAM7 | 329 | A7 | 32 | A7 |
| | MAM8 | 323 | A8 | 33 | A8 |
| | MAM9 | 321 | A9 | 34 | A9 |
| | MAM10 | 318 | A10 | 22 | A10 |
| | MAM11 | 316 | A11 | 35 | A11 |

| TC | IC6001 / AV DEC&MAIN CPU | | SIGNAL NAME | IC50002 / SDRAM | |
|---|---|---|---|---|---|
| | Port Name | Pin No | | Pin No | Port Name |
| 10 | MDQM16 | 292 | DQ16 | 2 | DQ0 |
| | MDQM17 | 295 | DQ17 | 4 | DQ1 |
| | MDQM18 | 297 | DQ18 | 5 | DQ2 |
| | MDQM19 | 299 | DQ19 | 7 | DQ3 |
| | MDQM20 | 302 | DQ20 | 8 | DQ4 |
| | MDQM21 | 304 | DQ21 | 10 | DQ5 |
| | MDQM22 | 308 | DQ22 | 11 | DQ6 |
| | MDQM23 | 310 | DQ23 | 13 | DQ7 |
| | MDQM24 | 309 | DQ24 | 42 | DQ8 |
| | MDQM25 | 305 | DQ25 | 44 | DQ9 |
| | MDQM26 | 303 | DQ26 | 45 | DQ10 |
| | MDQM27 | 301 | DQ27 | 47 | DQ11 |
| | MDQM28 | 298 | DQ28 | 48 | DQ12 |
| | MDQM29 | 296 | DQ29 | 50 | DQ13 |
| | MDQM30 | 293 | DQ30 | 51 | DQ14 |
| | MDQM31 | 291 | DQ31 | 53 | DQ15 |
| | MAM0 | 317 | A0 | 23 | A0 |
| | MAM1 | 320 | A1 | 24 | A1 |
| | MAM2 | 322 | A2 | 25 | A2 |
| | MAM3 | 328 | A3 | 26 | A3 |
| | MAM4 | 330 | A4 | 29 | A4 |
| | MAM5 | 332 | A5 | 30 | A5 |
| | MAM6 | 331 | A6 | 31 | A6 |
| | MAM7 | 329 | A7 | 32 | A7 |
| | MAM8 | 323 | A8 | 33 | A8 |
| | MAM9 | 321 | A9 | 34 | A9 |
| | MAM10 | 318 | A10 | 22 | A10 |
| | MAM11 | 316 | A11 | 35 | A11 |

| TC | IC6001 / AV DEC&MAIN CPU | | SIGNAL NAME | IC6005 IC6006 / W-MEMOR | |
|---|---|---|---|---|---|
| | Port Name | Pin No | | Pin No | Port Name |
| 11 | MD0 | 118 | MD0 | 2 | DQ0 |
| | MD1 | 121 | MD1 | 4 | DQ1 |
| | MD2 | 123 | MD2 | 5 | DQ2 |
| | MD3 | 125 | MD3 | 7 | DQ3 |
| | MD4 | 128 | MD4 | 8 | DQ4 |
| | MD5 | 130 | MD5 | 10 | DQ5 |
| | MD6 | 133 | MD6 | 11 | DQ6 |
| | MD7 | 135 | MD7 | 13 | DQ7 |
| | MD8 | 134 | MD8 | 42 | DQ8 |
| | MD9 | 131 | MD9 | 44 | DQ9 |
| | MD10 | 129 | MD10 | 45 | DQ10 |
| | MD11 | 127 | MD11 | 47 | DQ11 |
| | MD12 | 124 | MD12 | 48 | DQ12 |
| | MD13 | 122 | MD13 | 50 | DQ13 |
| | MD14 | 119 | MD14 | 51 | DQ14 |
| | MD15 | 117 | MD15 | 53 | DQ15 |
| | MA0 | 160 | MA0 | 23 | A0 |
| | MA1 | 163 | MA1 | 24 | A1 |
| | MA2 | 165 | MA2 | 25 | A2 |
| | MA3 | 167 | MA3 | 26 | A3 |
| | MA4 | 166 | MA4 | 29 | A4 |
| | MA5 | 164 | MA5 | 30 | A5 |
| | MA6 | 161 | MA6 | 31 | A6 |
| | MA7 | 159 | MA7 | 32 | A7 |
| | MA8 | 156 | MA8 | 33 | A8 |
| | MA9 | 153 | MA9 | 34 | A9 |
| | MA10 | 157 | MA10 | 22 | A10 |
| | MA11 | 151 | MA11 | 35 | A11 |
| | MA12 | 147 | MA12 | 36 | NC |
| | MA13 | 154 | MA13 | 21 | A12 |
| | MA14 | 152 | MA14 | 20 | A13 |

| TC | IC3501 / RTSC | | SIGNAL NAME | IC3502/ SDRAM | |
|---|---|---|---|---|---|
| | Port Name | Pin No | | Pin No | Port Name |
| 12 | MDQ0 | 281 | TR MADQB0 | 2 | DQ0 |
| | MDQ1 | 280 | TR MADQB1 | 4 | DQ1 |
| | MDQ2 | 278 | TR MADQB2 | 5 | DQ2 |
| | MDQ3 | 277 | TR MADQB3 | 7 | DQ3 |
| | MDQ4 | 276 | TR MADQB4 | 8 | DQ4 |
| | MDQ5 | 274 | TR MADQB5 | 10 | DQ5 |
| | MDQ6 | 273 | TR MADQB6 | 11 | DQ6 |
| | MDQ7 | 272 | TR MADQB7 | 13 | DQ7 |
| | MDQ8 | 270 | TR MADQB8 | 42 | DQ8 |
| | MDQ9 | 269 | TR MADQB9 | 44 | DQ9 |
| | MDQ10 | 268 | TR MADQB10 | 45 | DQ10 |
| | MDQ11 | 266 | TR MADQB11 | 47 | DQ11 |
| | MDQ12 | 265 | TR MADQB12 | 48 | DQ12 |
| | MDQ13 | 264 | TR MADQB13 | 50 | DQ13 |
| | MDQ14 | 263 | TR MADQB14 | 51 | DQ14 |
| | MDQ15 | 262 | TR MADQB15 | 53 | DQ15 |
| | MADR0 | 10 | TR MAB0 | 23 | A0 |
| | MADR1 | 9 | TR MAB1 | 24 | A1 |
| | MADR2 | 8 | TR MAB2 | 25 | A2 |
| | MADR3 | 6 | TR MAB3 | 26 | A3 |
| | MADR4 | 5 | TR MAB4 | 29 | A4 |
| | MADR5 | 4 | TR MAB5 | 30 | A5 |
| | MADR6 | 3 | TR MAB6 | 31 | A6 |
| | MADR7 | 2 | TR MAB7 | 32 | A7 |
| | MADR8 | 302 | TR MAB8 | 33 | A8 |
| | MADR9 | 300 | TR MAB9 | 34 | A9 |
| | MADR10 | 299 | TR MAB10 | 22 | A10 |
| | MADR11 | 297 | TR MAB11 | 35 | A11 |
| | MADR12 | 293 | TR MAB12 | 36 | NC |

IC Pin Terminal Chart ( TC 23,TC24 )

| TC | IC37001/DV CODEC | | SIGNAL NAME | IC37005/SDRAM | |
|---|---|---|---|---|---|
| | Port Name | Pin No | | Pin No | Port Name |
| 23 | M0DT0 | 116 | MODTB0 | 2 | DQ0 |
| | M0DT1 | 115 | MODTB1 | 3 | DQ1 |
| | M0DT2 | 114 | MODTB2 | 5 | DQ2 |
| | M0DT3 | 112 | MODTB3 | 6 | DQ3 |
| | M0DT4 | 111 | MODTB4 | 8 | DQ4 |
| | M0DT5 | 110 | MODTB5 | 9 | DQ5 |
| | M0DT6 | 108 | MODTB6 | 11 | DQ6 |
| | M0DT7 | 107 | MODTB7 | 12 | DQ7 |
| | M0DT8 | 106 | MODTB8 | 39 | DQ8 |
| | M0DT9 | 104 | MODTB9 | 40 | DQ9 |
| | M0DT10 | 102 | MODTB10 | 42 | DQ10 |
| | M0DT11 | 101 | MODTB11 | 43 | DQ11 |
| | M0DT12 | 100 | MODTB12 | 45 | DQ12 |
| | M0DT13 | 98 | MODTB13 | 46 | DQ13 |
| | M0DT14 | 97 | MODTB14 | 48 | DQ14 |
| | M0DT15 | 96 | MODTB15 | 49 | DQ15 |
| | M0AD0 | 91 | MOADB0 | 21 | A0 |
| | M0AD1 | 90 | MOADB1 | 22 | A1 |
| | M0AD2 | 89 | MOADB2 | 23 | A2 |
| | M0AD3 | 88 | MOADB3 | 24 | A3 |
| | M0AD4 | 86 | MOADB4 | 27 | A4 |
| | M0AD5 | 85 | MOADB5 | 28 | A5 |
| | M0AD6 | 84 | MOADB6 | 29 | A6 |
| | M0AD7 | 83 | MOADB7 | 30 | A7 |
| | M0AD8 | 81 | MOADB8 | 31 | A8 |
| | M0AD9 | 80 | MOADB9 | 32 | A9 |
| | M0AP | 93 | MOAPB | 20 | A10 |
| | M0BA | 94 | MOBAB | 19 | BA |

| TC | IC37001 / DV CODEC | | SIGNAL NAME | IC3404 / AVENC | |
|---|---|---|---|---|---|
| | Port Name | Pin No | | Pin No | Port Name |
| 24 | REC656OUT0 | 33 | R656DD0 | 283 | R656IN0 |
| | REC656OUT1 | 32 | R656DD1 | 284 | R656IN1 |
| | REC656OUT2 | 31 | R656DD2 | 285 | R656IN2 |
| | REC656OUT3 | 30 | R656DD3 | 286 | R656IN3 |
| | REC656OUT4 | 28 | R656DD4 | 288 | R656IN4 |
| | REC656OUT5 | 27 | R656DD5 | 289 | R656IN5 |
| | REC656OUT6 | 26 | R656DD6 | 290 | R656IN6 |
| | REC656OUT7 | 25 | R656DD7 | 291 | R656IN7 |

MSD16 - MSD31 DATA BUS LINE (TC19-1, TC21-1,TC22-1,TC26-1 )

| TC | 19-1 | | 21-1 | | 22-1 | | 26-1 | |
|---|---|---|---|---|---|---|---|---|
| SIGNAL NAME | IC3404 / AVENC&RTSC | | IC3501 / RTSC | | IC6701 / GLUE | | IC37001 / DV CODEC | |
| | Pin No | Port Name | Pin No | Port Name | Pin No | Port Name | Pin No | Port Name |
| MSD16 | 203 | HD0 | 118 | HDAT0 | 12 | LDEV0 | 201 | ADDT0 |
| MSD17 | 204 | HD1 | 117 | HDAT1 | 13 | LDEV1 | 200 | ADDT1 |
| MSD18 | 206 | HD2 | 115 | HDAT2 | 11 | LDEV2 | 199 | ADDT2 |
| MSD19 | 207 | HD3 | 114 | HDAT3 | 10 | LDEV3 | 198 | ADDT3 |
| MSD20 | 209 | HD4 | 113 | HDAT4 | 7 | LDEV4 | 196 | ADDT4 |
| MSD21 | 210 | HD5 | 111 | HDAT5 | 8 | LDEV5 | 195 | ADDT5 |
| MSD22 | 212 | HD6 | 110 | HDAT6 | 9 | LDEV6 | 194 | ADDT6 |
| MSD23 | 213 | HD7 | 109 | HDAT7 | 14 | LDEV7 | 193 | ADDT7 |
| MSD24 | 215 | HD8 | 107 | HDAT8 | 2 | LDEV8 | 191 | ADDT8 |
| MSD25 | 216 | HD9 | 106 | HDAT9 | 4 | LDEV9 | 190 | ADDT9 |
| MSD26 | 217 | HD10 | 104 | HDAT10 | 3 | LDEV10 | 189 | ADDT10 |
| MSD27 | 218 | HD11 | 102 | HDAT11 | 208 | LDEV11 | 188 | ADDT11 |
| MSD28 | 220 | HD12 | 101 | HDAT12 | 207 | LDEV12 | 186 | ADDT12 |
| MSD29 | 221 | HD13 | 100 | HDAT13 | 6 | LDEV13 | 185 | ADDT13 |
| MSD30 | 223 | HD14 | 98 | HDAT14 | 205 | LDEV14 | 184 | ADDT14 |
| MSD31 | 224 | HD15 | 97 | HDAT15 | 203 | LDEV15 | 183 | ADDT15 |

MSA1 - MSA4 ADDRESS BUS LINE (TC16, TC19-2, TC21-2, TC22-2, TC26-2 )

| TC | 16 | | 19-2 | | 21-2 | | 22-2 | | 26-2 | |
|---|---|---|---|---|---|---|---|---|---|---|
| SIGNAL NAME | IC6004/BUFFER | | IC3404/AVENC | | IC3501/RTSC | | IC6701/GLUE | | IC37001 / DV CODEC | |
| | Pin No | Port Name | Pin No | Port Name | Pin No | Port Name | Pin No | Port Name | Pin No | Port Name |
| MSA1 | 18 | 1Y1 | 181 | HA0 | 68 | HADR1 | 167 | ADRL1 | 19 | AD1 |
| MSA2 | 16 | 1Y2 | 182 | HA1 | 69 | HADR2 | 164 | ADRL2 | 18 | AD2 |
| MSA3 | 14 | 1Y3 | 183 | HA2 | 70 | HADR3 | 165 | ADRL3 | 17 | AD3 |
| MSA4 | 12 | 1Y4 | 184 | HA3 | 71 | HADR4 | 166 | ADRL4 | 15 | AD4 |

SA0 - SA25 ADDRESS BUS LINE (TC13, TC14-1, TC15-1, TC17, TC18-1, TC20, TC25)

| TC | 13 | | 14-1 | | 15-1 | | 17 | | 18-1 | | 20 | | 25 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SIGNAL NAME** | **IC3404 / AVENC** | | **IC6701 / GLUE** | | **IC6001 / AVDEC&MAIN CPU** | | **IC6004 / BUFFER** | | **IC6003 / LOADER** | | **IC3501 / RTSC** | | **IC37001 / DV CODEC** | |
| | Pin No | Port Name | Pin No | Port Name | Pin No | Port Name | Pin No | Port Name | Pin No | Port Name | Pin No | Port Name | Pin No | Port Name |
| SA0 | - | - | - | - | 28 | SA0 | - | - | - | - | - | - | - | - |
| SA1 | - | - | - | - | 27 | SA1 | 2 | 1A1 | 25 | A0 | - | - | - | - |
| SA2 | - | - | - | - | 26 | SA2 | 4 | 1A2 | 24 | A1 | - | - | - | - |
| SA3 | - | - | - | - | 25 | SA3 | 6 | 1A3 | 23 | A2 | - | - | - | - |
| SA4 | - | - | - | - | 24 | SA4 | 8 | 1A4 | 22 | A3 | - | - | - | - |
| SA5 | 186 | HA4 | 163 | ADRL5 | 22 | SA5 | - | - | 21 | A4 | 75 | HADR5 | 14 | AD5 |
| SA6 | 187 | HA5 | 170 | ADRL6 | 20 | SA6 | - | - | 20 | A5 | 76 | HADR6 | 13 | AD6 |
| SA7 | 188 | HA6 | 168 | ADRL7 | 19 | SA7 | - | - | 19 | A6 | 77 | HADR7 | 12 | AD7 |
| SA8 | 189 | HA7 | - | - | 18 | SA8 | - | - | 18 | A7 | 78 | HADR8 | 10 | AD8 |
| SA9 | 191 | HA8 | - | - | 17 | SA9 | - | - | 8 | A8 | 79 | HADR9 | 9 | AD9 |
| SA10 | 192 | HA9 | - | - | 16 | SA10 | - | - | 7 | A9 | 80 | HADR10 | 8 | AD10 |
| SA11 | 194 | HA10 | - | - | 15 | SA11 | - | - | 6 | A10 | 81 | HADR11 | 7 | AD11 |
| SA12 | 195 | HA11 | - | - | 14 | SA12 | - | - | 5 | A11 | 82 | HADR12 | - | - |
| SA13 | - | - | - | - | 12 | SA13 | - | - | 4 | A12 | 85 | HADR13 | - | - |
| SA14 | - | - | - | - | 11 | SA14 | - | - | 3 | A13 | 86 | HADR14 | - | - |
| SA15 | - | - | - | - | 10 | SA15 | - | - | 2 | A14 | 87 | HADR15 | - | - |
| SA16 | - | - | - | - | 9 | SA16 | - | - | 1 | A15 | 89 | HADR16 | - | - |
| SA17 | - | - | - | - | 8 | SA17 | - | - | 48 | A16 | 90 | HADR17 | - | - |
| SA18 | - | - | - | - | 7 | SA18 | - | - | 17 | A17 | 92 | HADR18 | - | - |
| SA19 | - | - | - | - | 6 | SA19 | - | - | 16 | A18 | 93 | HADR19 | - | - |
| SA20 | - | - | - | - | 3 | SA20 | - | - | - | - | 94 | HADR20 | - | - |
| SA21 | - | - | - | - | 2 | SA21 | - | - | - | - | 95 | HADR21 | - | - |
| SA22 | - | - | 174 | ADR22 | 1 | SA22 | - | - | - | - | - | - | - | - |
| SA23 | - | - | 171 | ADRH0 | 363 | SA23 | - | - | - | - | - | - | - | - |
| SA24 | - | - | 172 | ADRH1 | 362 | SA24 | - | - | - | - | - | - | - | - |
| SA25 | - | - | 173 | ADRH2 | 361 | SA25 | - | - | - | - | - | - | - | - |

SD16 - SD31 DATA BUS LINE (TC14-2, TC15-2, TC18-2 )

| TC | 14-2 | | 15-2 | | 18-2 | |
|---|---|---|---|---|---|---|
| **SIGNAL NAME** | **IC6701 / GLUE** | | **IC6001 / AVDEC&MAIN CPU** | | **IC6003 / LOADER** | |
| | Pin No | Port Name | Pin No | Port Name | Pin No | Port Name |
| SD16 | 201 | LDTI0 | 67 | SD16 | 29 | I/O0 |
| SD17 | 200 | LDTI1 | 66 | SD17 | 31 | I/O1 |
| SD18 | 199 | LDTI2 | 65 | SD18 | 33 | I/O2 |
| SD19 | 202 | LDTI3 | 64 | SD19 | 35 | I/O3 |
| SD20 | 197 | LDTI4 | 63 | SD20 | 38 | I/O4 |
| SD21 | 196 | LDTI5 | 62 | SD21 | 40 | I/O5 |
| SD22 | 198 | LDTI6 | 61 | SD22 | 42 | I/O6 |
| SD23 | 195 | LDTI7 | 59 | SD23 | 44 | I/O7 |
| SD24 | 194 | LDTI8 | 58 | SD24 | 30 | I/O8 |
| SD25 | 192 | LDTI9 | 57 | SD25 | 32 | I/O9 |
| SD26 | 191 | LDTI10 | 56 | SD26 | 34 | I/O10 |
| SD27 | 189 | LDTI11 | 55 | SD27 | 36 | I/O11 |
| SD28 | 190 | LDTI12 | 54 | SD28 | 39 | I/O12 |
| SD29 | 188 | LDTI13 | 53 | SD29 | 41 | I/O13 |
| SD30 | 187 | LDTI14 | 51 | SD30 | 43 | I/O14 |
| SD31 | 185 | LDTI15 | 50 | SD31 | 45 | I/O15 |

POWER P.C.B.

MAIN P.C.B.

AC SOCKET
P001

F001
125V3.15A

Z001,L001,L002
SURGE SUPPRESSOR AND SURGE ABSORBER

D001-D004
C009
RECTIFIER

T001
POWER TRANSFORMER
P2
P1
B1
B2
S3
S2
S4
S1

IC001
(SW IC)
F/B
DRAIN
Z/C
VCC

D101

IP101

Q110
Ⓛ:ON

D102

D103

Q105
(REG.D+1.8V)
D
S
G

F101
125V 4A

D+1.8V — PS102 P1502 21,22 — Ⓐ

IC103
(REG.D+3.3V)
VC
VIN
VOUT
Sense

D106
D107

D+3.3V — PS102 P1502 19,20 — Ⓑ

Q115

D120
ZD104

POWER ON Ⓗ — PS102 P1502 18 — Ⓒ

Q111
Ⓗ:ON

F102
125V 3.15A

X SW+5.8V — PS102 P1502 3,4 — Ⓓ

C011

Q114
Ⓛ:ON

DC-DC CIRCUIT
IC102
Q101-Q104
Q116-Q119

IC106
(REG.DR+12V)
VIN
VC
VOUT
Sense

DR+12V — PS101 1 — (TO HDD)

Q107
Ⓛ:ON

DR P ON Ⓗ — PS102 P1502 10 — IC7501- 86

IC109
(REG.DR+12V)
VIN
VC
VOUT
Sense

DR+12V — PS102 P1502 12,13 — P1501 P102 1,8 — (TO DVD RAM DRIVE)

Q106

ZD101

X SW+13V — PS102 P1502 2 — Ⓔ

IC101
(ERROR VOLTAGE DET.)

PC001
FEED BACK

D108

Q113
(REG.DR+5V)
D
S
G

F103
125V 3.15A

DR+5V — PS102 P1502 16,17 — P1501 P102 4,5 — (TO DVD RAM DRIVE)

DR+5V — PS101 4 — (TO HDD)

IC105
(RESET)
VCC
OUT

HDD PFAIL Ⓛ — PS102 P1502 23 — IC7501- 75

HOT

COLD

DMR-E95HP
Power Supply Block Diagram

DIGITAL P.C.B.

FP3501

| | |
|---|---|
| RESET- | 40 |
| GND | 39 |
| DD7 | 38 |
| DD8 | 37 |
| DD6 | 36 |
| DD9 | 35 |
| DD5 | 34 |
| DD10 | 33 |
| DD4 | 32 |
| DD11 | 31 |
| DD3 | 30 |
| DD12 | 29 |
| DD2 | 28 |
| DD13 | 27 |
| DD1 | 26 |
| DD14 | 25 |
| DD0 | 24 |
| DD15 | 23 |
| GND | 22 |
| ——— | 21 |
| DMRQ | 20 |
| GND | 19 |
| DIOW- | 18 |
| GND | 17 |
| NIOR- | 16 |
| GND | 15 |
| IORDY | 14 |
| CSEL | 13 |
| DMACK- | 12 |
| GND | 11 |
| INTRQ | 10 |
| ——— | 9 |
| DA1 | 8 |
| PDIAG- | 7 |
| DA0 | 6 |
| DA2 | 5 |
| CS0- | 4 |
| CS1- | 3 |
| ——— | 2 |
| GND | 1 |

P3501

| | |
|---|---|
| GND | 1 |
| SDAT3 | 2 |
| SDAT1 | 3 |
| SWP | 4 |
| SCLK | 5 |
| GND | 6 |
| PCD15 | 7 |
| PCD14 | 8 |
| PCD13 | 9 |
| PCD12 | 10 |
| PCD11 | 11 |
| PCD10 | 12 |
| PCD9 | 13 |
| PCD8 | 14 |
| GND | 15 |
| D3.3V | 16 |
| D5.0V | 17 |
| NCE2 | 18 |
| D5.9V | 19 |
| D5.9V | 20 |
| READY | 21 |
| GND | 22 |
| NIOW | 23 |
| NWE | 24 |
| NCD2 | 25 |
| NCD1 | 26 |
| NPWROM | 27 |
| DHDTX | 28 |
| XDIAG | 29 |
| PCA9 | 30 |
| PCA7 | 31 |
| PCA5 | 32 |
| PCA3 | 33 |
| PCA1 | 34 |
| MSOTX | 35 |
| MSORX | 36 |
| PCA0 | 37 |
| PCA2 | 38 |
| PCA4 | 39 |
| PCA6 | 40 |
| PCA8 | 41 |
| XRESET | 42 |
| STSCHG | 43 |
| NREG | 44 |
| WP | 45 |
| RESET | 46 |
| NOE | 47 |
| NIOR | 48 |
| GND | 49 |
| NWAIT | 50 |
| D5.9V | 51 |
| D5.9V | 52 |
| NCE1 | 53 |
| D5.0V | 54 |
| D3.3V | 55 |
| GND | 56 |
| PCD0 | 57 |
| PCD1 | 58 |
| PCD2 | 59 |
| PCD3 | 60 |
| PCD4 | 61 |
| PCD5 | 62 |
| PCD6 | 63 |
| PCD7 | 64 |
| GND | 65 |
| SCD | 66 |
| SCMD | 67 |
| SDAT0 | 68 |
| SDAT2 | 69 |
| GND | 70 |

PS37001

| | |
|---|---|
| 1 | TPA+ |
| 2 | TPA- |
| 3 | GND |
| 4 | GND |
| 5 | TPB+ |
| 6 | TPB- |

P102

| | |
|---|---|
| 1 | +12V |
| 2 | GND |
| 3 | M GND |
| 4 | +5V |
| 5 | +5V |
| 6 | M GND |
| 7 | GND |
| 8 | +12V |

FP601

| | |
|---|---|
| 1 | RESET- |
| 2 | GND |
| 3 | DD7 |
| 4 | DD8 |
| 5 | DD6 |
| 6 | DD9 |
| 7 | DD5 |
| 8 | DD10 |
| 9 | DD4 |
| 10 | DD11 |
| 11 | DD3 |
| 12 | DD12 |
| 13 | DD2 |
| 14 | DD13 |
| 15 | DD1 |
| 16 | DD14 |
| 17 | DD0 |
| 18 | DD15 |
| 19 | GND |
| 20 | ——— |
| 21 | DMARQ |
| 22 | GND |
| 23 | DIOW- |
| 24 | GND |
| 25 | DIOR- |
| 26 | GND |
| 27 | IORDY |
| 28 | CSEL |
| 29 | DMACK- |
| 30 | GND |
| 31 | INTRQ |
| 32 | IOCS16 |
| 33 | DA1 |
| 34 | PD1AG |
| 35 | DA0 |
| 36 | DA2 |
| 37 | CS0- |
| 38 | CS1- |
| 39 | DASP |
| 40 | GND |

DVD RAM DRIVE

FP602

| | |
|---|---|
| GND | 40 |
| DASP- | 39 |
| CS1- | 38 |
| CS0- | 37 |
| DA2 | 36 |
| DA0 | 35 |
| PDIAG | 34 |
| DA1 | 33 |
| IOCS16 | 32 |
| INTRQ | 31 |
| GND | 30 |
| DMACK- | 29 |
| CSEL | 28 |
| IORDY | 27 |
| GND | 26 |
| DIOR- | 25 |
| GND | 24 |
| DIOW- | 23 |
| GND | 22 |
| DMARQ | 21 |
| ——— | 20 |
| GND | 19 |
| DD15 | 18 |
| DD0 | 17 |
| DD14 | 16 |
| DD1 | 15 |
| DD13 | 14 |
| DD2 | 13 |
| DD12 | 12 |
| DD3 | 11 |
| DD11 | 10 |
| DD4 | 9 |
| DD10 | 8 |
| DD5 | 7 |
| DD9 | 6 |
| DD6 | 5 |
| DD8 | 4 |
| DD7 | 3 |
| GND | 2 |
| RESET- | 1 |

| | |
|---|---|
| 1 | 5V |
| 2 | GND |
| 3 | GND |
| 4 | 12V |

HDD DRIVE

P8001

| | |
|---|---|
| 8 | ITA2M |
| 7 | ITM2A |
| 6 | BUSY |
| 5 | FL CLK |
| 4 | FL DATA |
| 3 | XIR CS |
| 2 | GND |
| 1 | D5V |

IR P.C.B.

P6801

| | |
|---|---|
| 1 | GND |
| 2 | SDAT3 |
| 3 | SDAT1 |
| 4 | SWP |
| 5 | SCLK |
| 6 | GND |
| 7 | PCD15 |
| 8 | PCD14 |
| 9 | PCD13 |
| 10 | PCD12 |
| 11 | PCD11 |
| 12 | PCD10 |
| 13 | PCD9 |
| 14 | PCD8 |
| 15 | GND |
| 16 | D3.3V |
| 17 | D5.0V |
| 18 | NCE2 |
| 19 | D5.9V |
| 20 | D5.9V |
| 21 | READY |
| 22 | GND |
| 23 | NIOW |
| 24 | NWE |
| 25 | NCD2 |
| 26 | NCD1 |
| 27 | NPWROM |
| 28 | DHDTX |
| 29 | XDIAG |
| 30 | PCA9 |
| 31 | PCA7 |
| 32 | PCA5 |
| 33 | PCA3 |
| 34 | PCA1 |
| 35 | MSOTX |
| 36 | MSORX |
| 37 | PCA0 |
| 38 | PCA2 |
| 39 | PCA4 |
| 40 | PCA6 |
| 41 | PCA8 |
| 42 | XRESET |
| 43 | STSCHG |
| 44 | NREG |
| 45 | WP |
| 46 | RESET |
| 47 | NOE |
| 48 | NIOR |
| 49 | GND |
| 50 | NWAIT |
| 51 | D5.9V |
| 52 | D5.9V |
| 53 | NCE1 |
| 54 | D5.0V |
| 55 | D3.3V |
| 56 | GND |
| 57 | PCD0 |
| 58 | PCD1 |
| 59 | PCD2 |
| 60 | PCD3 |
| 61 | PCD4 |
| 62 | PCD5 |
| 63 | PCD6 |
| 64 | PCD7 |
| 65 | GND |
| 66 | SCD |
| 67 | SCMD |
| 68 | SDAT0 |
| 69 | SDAT2 |
| 70 | GND |

P6802

| | |
|---|---|
| GND | 1 |
| D3 | 2 |
| D4 | 3 |
| D5 | 4 |
| D6 | 5 |
| D7 | 6 |
| XCE1 | 7 |
| A10 | 8 |
| XOE | 9 |
| A11 | 10 |
| A9 | 11 |
| A8 | 12 |
| A13 | 13 |
| A14 | 14 |
| XWE | 15 |
| READY | 16 |
| VCC | 17 |
| VPP | 18 |
| A16 | 19 |
| A15 | 20 |
| A12 | 21 |
| A7 | 22 |
| A6 | 23 |
| A5 | 24 |
| A4 | 25 |
| A3 | 26 |
| A2 | 27 |
| A1 | 28 |
| A0 | 29 |
| D0 | 30 |
| D1 | 31 |
| D2 | 32 |
| WP | 33 |
| GND | 34 |
| GND | 35 |
| XCD1 | 36 |
| D11 | 37 |
| D12 | 38 |
| D13 | 39 |
| D14 | 40 |
| D15 | 41 |
| XCE2 | 42 |
| XVS1 | 43 |
| XIOR | 44 |
| XIOW | 45 |
| A17 | 46 |
| A18 | 47 |
| A19 | 48 |
| A20 | 49 |
| A21 | 50 |
| VCC | 51 |
| VPP | 52 |
| A22 | 53 |
| A23 | 54 |
| A24 | 55 |
| A25 | 56 |
| XVS2 | 57 |
| RESET | 58 |
| XWAIT | 59 |
| RFU | 60 |
| XREG | 61 |
| BVD2 | 62 |
| XSTCG | 63 |
| D8 | 64 |
| D9 | 65 |
| D10 | 66 |
| XCD2 | 67 |
| GND | 68 |

TO PC CARD

P6803

| | |
|---|---|
| DAT3 | 1 |
| CMD | 2 |
| GND | 3 |
| 3.3V | 4 |
| CLK | 5 |
| GND | 6 |
| DAT0 | 7 |
| DAT1 | 8 |
| DAT2 | 9 |
| CD | 10 |
| COM | 11 |
| WP | 12 |
| FG | 13 |

TO SD CARD

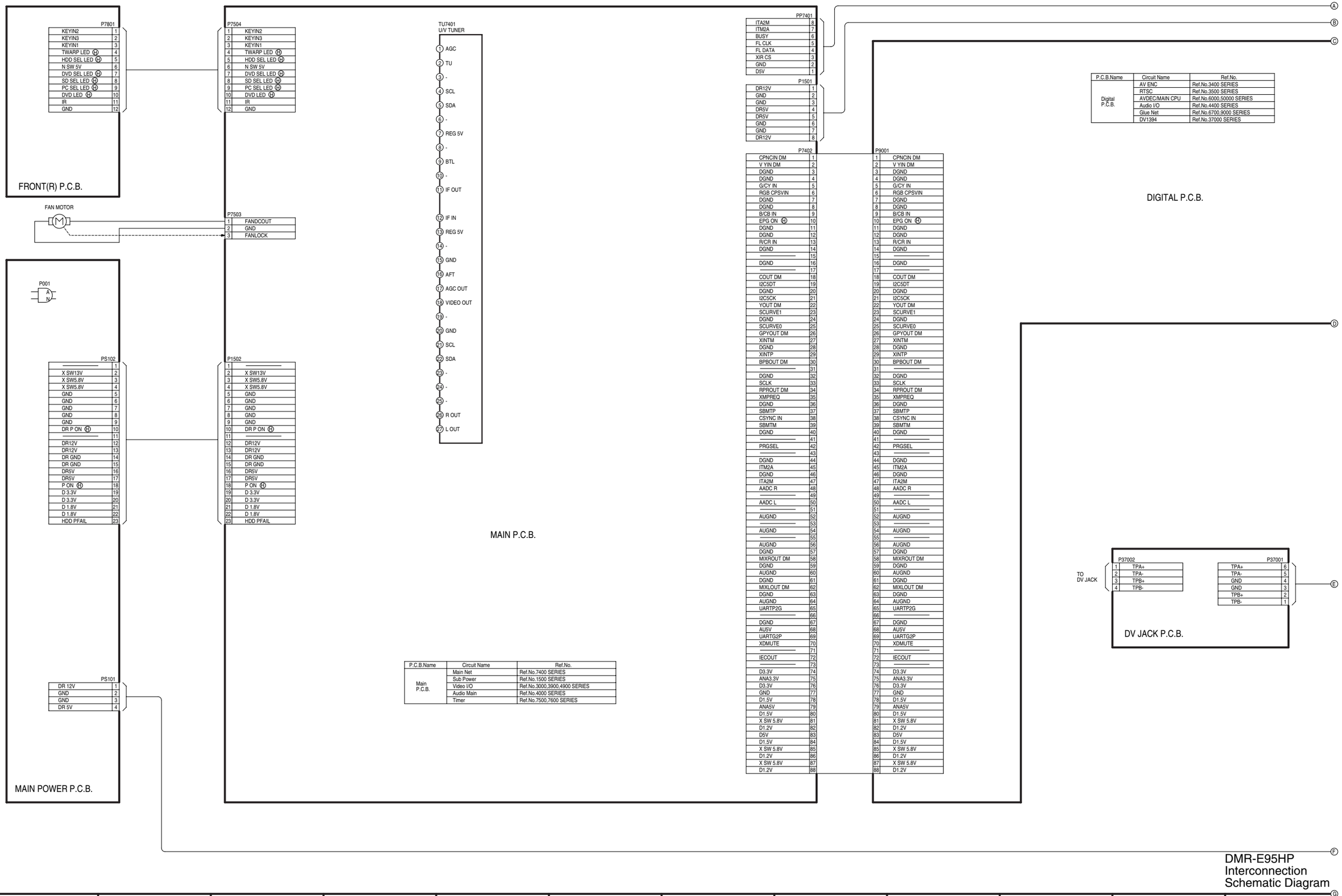
SD & PC CARD P.C.B.

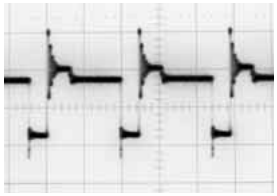
# DMR-E95HP Interconnection Schematic Diagram

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

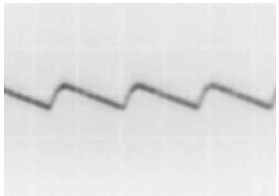
DMR-E95HP Interconnection Schematic Diagram

13 14 15 16 17 18 19 20 21 22 23 24


FRONT(R) P.C.B.
P7801
KEYIN2 1
KEYIN3 2
KEYIN1 3
TWARP LED (H) 4
HDD SEL LED (H) 5
N SW 5V 6
DVD SEL LED (H) 7
SD SEL LED (H) 8
PC SEL LED (H) 9
DVD LED (H) 10
IR 11
GND 12
P7504
1 KEYIN2
2 KEYIN3
3 KEYIN1
4 TWARP LED (H)
5 HDD SEL LED (H)
6 N SW 5V
7 DVD SEL LED (H)
8 SD SEL LED (H)
9 PC SEL LED (H)
10 DVD LED (H)
11 IR
12 GND
FAN MOTOR
P7503
1 FANDCOUT
2 GND
3 FANLOCK
P001
A
N
PS102
X SW13V 2
X SW5.8V 3
X SW5.8V 4
GND 5
GND 6
GND 7
GND 8
GND 9
DR P ON (H) 10
DR12V 12
DR12V 13
DR GND 14
DR GND 15
DR5V 16
DR5V 17
P ON (H) 18
D 3.3V 19
D 3.3V 20
D 1.8V 21
D 1.8V 22
HDD PFAIL 23
P1502
2 X SW13V
3 X SW5.8V
4 X SW5.8V
5 GND
6 GND
7 GND
8 GND
9 GND
10 DR P ON (H)
12 DR12V
13 DR12V
14 DR GND
15 DR GND
16 DR5V
17 DR5V
18 P ON (H)
19 D 3.3V
20 D 3.3V
21 D 1.8V
22 D 1.8V
23 HDD PFAIL
PS101
DR 12V 1
GND 2
GND 3
DR 5V 4
MAIN POWER P.C.B.
MAIN P.C.B.
TU7401
U/V TUNER
1 AGC
2 TU
3 -
4 SCL
5 SDA
6 -
7 REG 5V
8 -
9 BTL
10 -
11 IF OUT
12 IF IN
13 REG 5V
14 -
15 GND
16 AFT
17 AGC OUT
18 VIDEO OUT
19 -
20 GND
21 SCL
22 SDA
23 -
24 -
25 -
26 R OUT
27 L OUT
PP7401
ITA2M 8
ITM2A 7
BUSY 6
FL CLK 5
FL DATA 4
XIR CS 3
GND 2
D5V 1
P1501
DR12V 1
GND 2
GND 3
DR5V 4
DR5V 5
GND 6
GND 7
DR12V 8
P7402
CPNCIN DM 1
V YIN DM 2
DGND 3
DGND 4
G/CY IN 5
RGB CPSVIN 6
DGND 7
DGND 8
B/CB IN 9
EPG ON (H) 10
DGND 11
DGND 12
R/CR IN 13
DGND 14
15
DGND 16
17
COUT DM 18
I2C5DT 19
DGND 20
I2C5CK 21
YOUT DM 22
SCURVE1 23
DGND 24
SCURVE0 25
GPYOUT DM 26
XINTM 27
DGND 28
XINTP 29
BPBOUT DM 30
31
DGND 32
SCLK 33
RPROUT DM 34
XMPREQ 35
DGND 36
SBMTP 37
CSYNC IN 38
SBMTM 39
DGND 40
41
PRGSEL 42
43
DGND 44
ITM2A 45
DGND 46
ITA2M 47
AADC R 48
49
AADC L 50
51
AUGND 52
53
AUGND 54
55
AUGND 56
DGND 57
MIXROUT DM 58
DGND 59
AUGND 60
DGND 61
MIXLOUT DM 62
DGND 63
AUGND 64
UARTP2G 65
66
DGND 67
AU5V 68
UARTG2P 69
XDMUTE 70
71
IECOUT 72
73
D3.3V 74
ANA3.3V 75
D3.3V 76
GND 77
D1.5V 78
ANA5V 79
D1.5V 80
X SW 5.8V 81
D1.2V 82
D5V 83
D1.5V 84
X SW 5.8V 85
D1.2V 86
X SW 5.8V 87
D1.2V 88
P9001
1 CPNCIN DM
2 V YIN DM
3 DGND
4 DGND
5 G/CY IN
6 RGB CPSVIN
7 DGND
8 DGND
9 B/CB IN
10 EPG ON (H)
11 DGND
12 DGND
13 R/CR IN
14 DGND
15
16 DGND
17
18 COUT DM
19 I2C5DT
20 DGND
21 I2C5CK
22 YOUT DM
23 SCURVE1
24 DGND
25 SCURVE0
26 GPYOUT DM
27 XINTM
28 DGND
29 XINTP
30 BPBOUT DM
31
32 DGND
33 SCLK
34 RPROUT DM
35 XMPREQ
36 DGND
37 SBMTP
38 CSYNC IN
39 SBMTM
40 DGND
41
42 PRGSEL
43
44 DGND
45 ITM2A
46 DGND
47 ITA2M
48 AADC R
49
50 AADC L
51
52 AUGND
53
54 AUGND
55
56 AUGND
57 DGND
58 MIXROUT DM
59 DGND
60 AUGND
61 DGND
62 MIXLOUT DM
63 DGND
64 AUGND
65 UARTP2G
66
67 DGND
68 AU5V
69 UARTG2P
70 XDMUTE
71
72 IECOUT
73
74 D3.3V
75 ANA3.3V
76 D3.3V
77 GND
78 D1.5V
79 ANA5V
80 D1.5V
81 X SW 5.8V
82 D1.2V
83 D5V
84 D1.5V
85 X SW 5.8V
86 D1.2V
87 X SW 5.8V
88 D1.2V
DIGITAL P.C.B.
P.C.B.Name | Circuit Name | Ref.No.
Digital P.C.B. | AV ENC | Ref.No.3400 SERIES
RTSC | Ref.No.3500 SERIES
AVDEC/MAIN CPU | Ref.No.6000,50000 SERIES
Audio I/O | Ref.No.4400 SERIES
Glue Net | Ref.No.6700,9000 SERIES
DV1394 | Ref.No.37000 SERIES
P.C.B.Name | Circuit Name | Ref.No.
Main P.C.B. | Main Net | Ref.No.7400 SERIES
Sub Power | Ref.No.1500 SERIES
Video I/O | Ref.No.3000,3900,4900 SERIES
Audio Main | Ref.No.4000 SERIES
Timer | Ref.No.7500,7600 SERIES
TO DV JACK
P37002
1 TPA+
2 TPA-
3 TPB+
4 TPB-
P37001
TPA+ 6
TPA- 5
GND 4
GND 3
TPB+ 2
TPB- 1
DV JACK P.C.B.
DMR-E95HP
Interconnection
Schematic Diagram



T001-P1 STOP
120Vp-p (5 $\mu$ sec.div)



T001-P2 STOP
8.0Vp-p (5m sec.div)



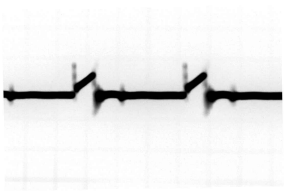
T001-B1 STOP
64Vp-p (5 $\mu$ sec.div)



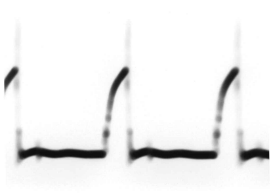
T001-S3 STOP
54Vp-p (5 $\mu$ sec.div)



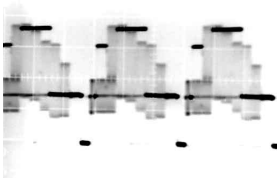
T001-S4 STOP
25Vp-p (5 $\mu$ sec.div)



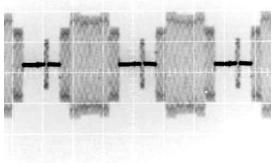
IC001-2 STOP
1.0Vp-p (5 $\mu$ sec.div)



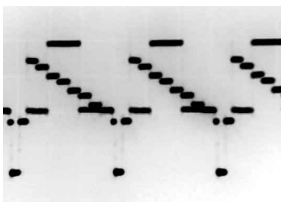
IC001-5 STOP
1.0Vp-p (5 $\mu$ sec.div)



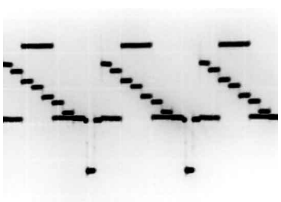
P7402-2 REC/PLAY
0.8Vp-p (20 $\mu$ sec.div)



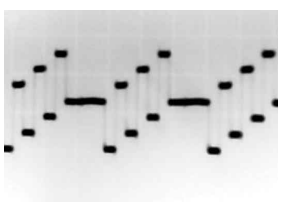
P7402-18 REC/PLAY
0.7Vp-p (20 $\mu$ sec.div)



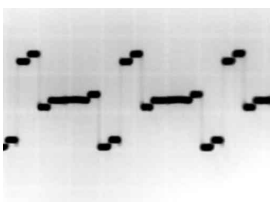
P7402-22 REC/PLAY
0.7Vp-p (20 $\mu$ sec.div)



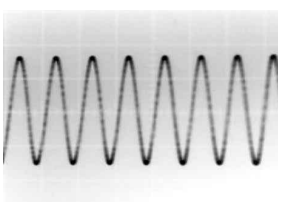
P7402-26 REC/PLAY
0.7Vp-p (20 $\mu$ sec.div)



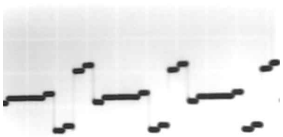
P7402-30 REC/PLAY
0.6Vp-p (20 $\mu$ sec.div)



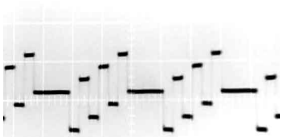
P7402-34 REC/PLAY
0.6Vp-p (20 $\mu$ sec.div)



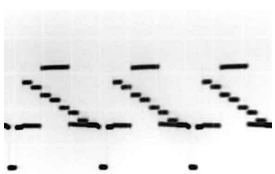
P7402-48,50 REC/PLAY
0.8Vp-p (1m sec.div)



JK3903-18 REC/PLAY
1.0Vp-p (20 $\mu$ sec.div)



JK3903-19 REC/PLAY
1.0Vp-p (20 $\mu$ sec.div)



JK3903-20 REC/PLAY
1.5Vp-p (20 $\mu$ sec.div)

| Ref No. | P9001 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| REC | 2.0 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.3 | 0 | 0 | 0 | 0 | 3.2 | 0 | 4.9 | 1.5 | 4.9 | 0 |
| PLAY | 2.0 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.3 | 0 | 0 | 0 | 0 | 3.2 | 0 | 4.9 | 1.5 | 4.9 | 0 |
| STOP | 2.0 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3.3 | 0 | 0 | 0 | 0 | 3.3 | 0 | 4.9 | 1.5 | 4.9 | 0 |
| Ref No. | P9001 | | | | | | | | | | | | | | | | | | | |
| MODE | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| REC | 4.9 | 1.0 | 3.3 | 0 | 0 | 1.0 | 4.9 | 0 | 4.9 | 1.0 | 4.6 | 0 | 4.9 | 1.0 | 4.9 | 0 | 4.9 | 0 | 4.9 | 0 |
| PLAY | 4.9 | 1.0 | 3.3 | 0 | 0 | 1.0 | 4.9 | 0 | 4.9 | 1.0 | 4.6 | 0 | 4.9 | 1.0 | 4.9 | 0 | 4.9 | 0 | 4.9 | 0 |
| STOP | 4.9 | 1.0 | 3.3 | 0 | 0 | 1.0 | 4.9 | 0 | 4.9 | 1.0 | 4.6 | 0 | 4.9 | 1.0 | 4.9 | 0 | 4.9 | 0 | 4.9 | 0 |
| Ref No. | P9001 | | | | | | | | | | | | | | | | | | | |
| MODE | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| REC | 0 | 3.3 | 0 | 0 | 3.3 | 0 | 2.9 | 2.5 | 0 | 2.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.4 | 0 | 0 |
| PLAY | 0 | 3.3 | 0 | 0 | 3.3 | 0 | 2.9 | 2.5 | 0 | 2.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.4 | 0 | 0 |
| STOP | 0 | 3.3 | 0 | 0 | 3.3 | 0 | 2.9 | 2.5 | 0 | 2.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.4 | 0 | 0 |
| Ref No. | P9001 | | | | | | | | | | | | | | | | | | | |
| MODE | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| REC | 0 | 2.5 | 0 | 0 | 4.9 | 0 | 0 | 4.9 | 4.9 | 2.3 | 0 | 1.6 | 0 | 3.3 | 3.3 | 3.3 | 0 | 1.5 | 5.0 | 1.5 |
| PLAY | 0 | 2.5 | 0 | 0 | 4.9 | 0 | 0 | 4.9 | 4.9 | 2.3 | 0 | 1.6 | 0 | 3.3 | 3.3 | 3.3 | 0 | 1.5 | 5.0 | 1.5 |
| STOP | 0 | 2.5 | 0 | 0 | 4.9 | 0 | 0 | 4.9 | 4.9 | 2.3 | 0 | 1.6 | 0 | 3.3 | 3.3 | 3.3 | 0 | 1.5 | 5.0 | 1.5 |
| Ref No. | P9001 | | | | | | | | | | | | | | | | | | | |
| MODE | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | | | | | | | | | | | | |
| REC | 5.7 | 1.2 | 4.9 | 1.5 | 5.7 | 1.2 | 5.7 | 1.2 | | | | | | | | | | | | |
| PLAY | 5.7 | 1.2 | 4.9 | 1.5 | 5.7 | 1.2 | 5.7 | 1.2 | | | | | | | | | | | | |
| STOP | 5.7 | 1.2 | 4.9 | 1.5 | 5.7 | 1.2 | 5.7 | 1.2 | | | | | | | | | | | | |

| Ref No. | QR7801 | | | QR7802 | | | QR7803 | | | QR7804 | | | QR7805 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B |
| REC | 0 | 3.4 | 0 | 0 | 3.6 | 0 | 0 | 0.1 | 4.9 | 0 | 3.4 | 0 | 0 | 0.1 | 4.9 |
| PLAY | 0 | 3.4 | 0 | 0 | 3.6 | 0 | 0 | 0.1 | 4.9 | 0 | 3.4 | 0 | 0 | 0.1 | 4.9 |
| STOP | 0 | 3.4 | 0 | 0 | 3.6 | 0 | 0 | 0.1 | 4.9 | 0 | 3.4 | 0 | 0 | 0.1 | 4.9 |

| Ref No. | QR7806 | | |
|---|---|---|---|
| MODE | E | C | B |
| REC | 0 | 0 | 4.9 |
| PLAY | 0 | 0 | 4.9 |
| STOP | 0 | 0 | 4.9 |

| Ref No. | IC8001 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| REC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.7 | 2.4 | 0 | 2.3 | 5.0 | 5.0 | 0 | 0 | 5.0 | 0 | 0 | 0 |
| PLAY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.7 | 2.4 | 0 | 2.3 | 5.0 | 5.0 | 0 | 0 | 5.0 | 0 | 0 | 0 |
| STOP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.7 | 2.4 | 0 | 2.3 | 5.0 | 5.0 | 0 | 0 | 5.0 | 0 | 0 | 0 |

| Ref No. | IC8001 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| REC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.2 | 4.2 | 4.4 | 0 | 0 | 0 | 0 | 0 | 5.0 | 0 | 0 | 0 | 0 |
| PLAY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.2 | 4.2 | 4.4 | 0 | 0 | 0 | 0 | 0 | 5.0 | 0 | 0 | 0 | 0 |
| STOP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.2 | 4.2 | 4.4 | 0 | 0 | 0 | 0 | 0 | 5.0 | 0 | 0 | 0 | 0 |

| Ref No. | IC8001 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| REC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PLAY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| STOP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Ref No. | IC8001 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| REC | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5.0 | 5.0 | 0 | 0 |
| PLAY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5.0 | 5.0 | 0 | 0 |
| STOP | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5.0 | 5.0 | 0 | 0 |

| Ref No. | IC8002 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | | | | | | | | | | | | | | | |
| REC | 4.7 | 5.0 | 0 | 0 | 1.8 | | | | | | | | | | | | | | | |
| PLAY | 4.7 | 5.0 | 0 | 0 | 1.8 | | | | | | | | | | | | | | | |
| STOP | 4.7 | 5.0 | 0 | 0 | 1.8 | | | | | | | | | | | | | | | |

| Ref No. | Q8001 | | | | Q8002 | | | | Q8003 | | | | Q8004 | | | | Q8005 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | E | C | B | | E | C | B | | E | C | B | | E | C | B | | E | C | B | |
| REC | 4.4 | 4.4 | 4.6 | | 3.9 | 4.2 | 4.3 | | 4.9 | 5.0 | 5.0 | | 0 | 5.0 | 0 | | 0 | 0 | 0 | |
| PLAY | 4.4 | 4.4 | 4.6 | | 3.9 | 4.2 | 4.3 | | 4.9 | 5.0 | 5.0 | | 0 | 5.0 | 0 | | 0 | 0 | 0 | |
| STOP | 4.4 | 4.4 | 4.6 | | 3.9 | 4.2 | 4.3 | | 4.9 | 5.0 | 5.0 | | 0 | 5.0 | 0 | | 0 | 0 | 0 | |

| Ref No. | IC6801 | | | | | | | | | IC6802 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | |
| PLAY | 0 | 0 | 3.3 | 0 | 0 | 3.3 | 0 | 3.3 | | 0 | 3.3 | 0 | 0 | 0 | 4.9 | 0 | 4.9 | | | |
| Ref No. | IC6803 | | | | | | | | | | | | | | | | | | | |
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| PLAY | 0 | 4.9 | 4.9 | 0 | 4.9 | 0 | 4.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.9 | 4.9 | 4.9 |
| Ref No. | IC6803 | | | | | | | | | | | | | | | | | | | |
| MODE | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| PLAY | 0 | 4.9 | 4.9 | 0 | 0 | 3.3 | 3.3 | 0 | 3.3 | 3.3 | 4.9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ref No. | IC6803 | | | | | | | | | | | | | | | | | | | |
| MODE | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | | | | | | | | | | | | |
| PLAY | 0 | 4.9 | 0 | 3.3 | 0 | 3.3 | 3.3 | 0 | | | | | | | | | | | | |
| Ref No. | IC6804 | | | | | | | | | | | | | | | | | | | |
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| PLAY | 0 | 0 | 0.1 | 0 | 0.1 | 0 | 4.9 | 0 | 4.9 | 0 | 0 | 0.1 | 0.1 | 0.1 | 0.1 | 0 | 0.1 | 4.9 | 0.1 | 0.1 |
| Ref No. | IC6804 | | | | | | | | | | | | | | | | | | | |
| MODE | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| PLAY | 0 | 0.1 | 0.1 | 0 | 3.3 | 0.3 | 0.3 | 0 | 0.3 | 0.3 | 3.3 | 0.3 | 0.3 | 0 | 0.3 | 0.3 | 0 | 0 | 0 | 0 |
| Ref No. | IC6804 | | | | | | | | | | | | | | | | | | | |
| MODE | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | | | | | | | | | | | | |
| PLAY | 0 | 3.3 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | |
| Ref No. | IC6805 | | | | | | | | | | | | | | | | | | | |
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | | | | | | |
| PLAY | 3.3 | 3.3 | 5.0 | 0 | 3.3 | 3.3 | 3.3 | 3.3 | | | | | | | | | | | | |
| Ref No. | IC6806 | | | | | | | | | | | | | | | IC6807 | | | | |
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | | 1 | 2 | 3 | 4 | 5 |
| PLAY | 0.6 | 3.3 | 3.3 | 0 | 3.3 | 0 | 0 | 0 | 3.3 | 3.3 | 0.6 | 3.3 | 0 | 3.3 | | 1.7 | 5.7 | 0 | 5.0 | 5.0 |
| Ref No. | IC6809 | | | | | | | | | | | | | | | | | | | |
| MODE | 1 | 2 | 3 | 4 | 5 | | | | | | | | | | | | | | | |
| PLAY | 1.9 | 5.0 | 0 | 0 | 0 | | | | | | | | | | | | | | | |
| Ref No. | Q6801 | | | | | | | | | | | | | | | | | | | |
| MODE | E | C | B | | | | | | | | | | | | | | | | | |
| PLAY | 0 | 0 | 1.9 | | | | | | | | | | | | | | | | | |
| Ref No. | QR6801 | | | | | | | | | | | | | | | | | | | |
| MODE | E | C | B | | | | | | | | | | | | | | | | | |
| PLAY | 0 | 1.7 | 0.2 | | | | | | | | | | | | | | | | | |

| Ref No. | IC1502 | | | | | | IC1505 | | | | | | | | | IC1506 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | 1 | 2 | 3 | 4 | 5 |
| REC | 6.0 | 4.9 | 5.0 | - | 0 | | 5.2 | - | 0 | 3.3 | 6.0 | - | - | 6.0 | | 1.2 | 0 | 4.9 | 6.0 | 5.0 |
| PLAY | 6.0 | 4.9 | 5.0 | - | 0 | | 5.2 | - | 0 | 3.3 | 6.0 | - | - | 6.0 | | 1.2 | 0 | 4.9 | 6.0 | 5.0 |
| STOP | 6.0 | 4.9 | 5.0 | - | 0 | | 5.2 | - | 0 | 3.3 | 6.0 | - | - | 6.0 | | 1.2 | 0 | 4.9 | 6.0 | 5.0 |

| Ref No. | IC1507 | | | | | | | | IC1508 | | | | | IC1509 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | |
| REC | 5.0 | - | 0 | 3.1 | 4.9 | - | - | 6.0 | 6.0 | 4.9 | 3.3 | - | 0 | 1.8 | 3.3 | 1.2 | 1.0 | 0 | |
| PLAY | 5.0 | - | 0 | 3.1 | 4.9 | - | - | 6.0 | 6.0 | 4.9 | 3.3 | - | 0 | 1.8 | 3.3 | 1.2 | 1.0 | 0 | |
| STOP | 5.0 | - | 0 | 3.1 | 4.9 | - | - | 6.0 | 6.0 | 4.9 | 3.3 | - | 0 | 1.8 | 3.3 | 1.2 | 1.0 | 0 | |

| Ref No. | IC1510 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| REC | 1.5 | 0.8 | 3.3 | 3.3 | 0 | 0 | 1.8 | 1.8 |
| PLAY | 1.5 | 0.8 | 3.3 | 3.3 | 0 | 0 | 1.8 | 1.8 |
| STOP | 1.5 | 0.8 | 3.3 | 3.3 | 0 | 0 | 1.8 | 1.8 |

| Ref No. | IC3001 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| REC | 1.4 | 0 | 1.6 | 4.9 | 1.4 | 4.8 | 1.4 | 4.6 | 0.1 | 2.6 | 0 | 1.4 | 4.8 | 1.4 | 0 | 0.1 | 2.6 | 0 | 1.7 | 4.8 |
| PLAY | 1.4 | 0 | 1.6 | 4.9 | 1.4 | 4.8 | 1.4 | 4.6 | 0.1 | 2.6 | 0 | 1.4 | 4.8 | 1.4 | 0 | 0.1 | 2.6 | 0 | 1.8 | 4.8 |
| STOP | 1.4 | 0 | 1.6 | 4.9 | 1.4 | 4.8 | 1.3 | 4.6 | 0.1 | 2.6 | 0 | **1.4** | 4.8 | 1.4 | 0 | 0.1 | 2.6 | 0 | 1.8 | 4.8 |

| Ref No. | IC3001 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| REC | 1.3 | 0 | 0.1 | 2.6 | 4.9 | 1.6 | 1.6 | 1.8 | 1.8 | 2.1 | 0 | 2.1 | 2.1 | 2.1 | 2.1 | 1.6 | 1.5 | 0 | 1.8 | 4.9 |
| PLAY | 1.4 | 0 | 0.1 | 2.6 | 4.9 | 1.6 | 1.6 | 1.8 | 1.8 | 2.1 | 0 | 2.1 | 2.1 | 2.1 | 2.1 | 1.6 | 1.5 | 0 | 1.8 | 4.9 |
| STOP | 1.3 | 0 | 0.1 | 2.6 | 4.9 | 1.6 | 1.6 | 1.8 | 1.8 | 2.1 | 0 | 2.1 | 2.1 | 2.1 | 2.1 | 1.6 | 1.5 | 0 | 1.8 | 4.9 |

| Ref No. | IC3001 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| REC | 2.7 | 0 | 2.7 | 4.9 | 2.7 | 2.7 | 1.7 | 4.6 | 2.7 | 0 | 2.7 | 4.9 | 2.7 | 2.9 | 1.0 | 0 | 4.9 | 4.9 | 4.9 | 0.1 |
| PLAY | 2.7 | 0 | 2.7 | 4.9 | 2.7 | 2.7 | 1.8 | 4.6 | 2.7 | 0 | 2.7 | 4.9 | 2.7 | 2.9 | 1.0 | 0 | 4.9 | 4.9 | 4.9 | 0.1 |
| STOP | 2.7 | 0 | 2.7 | 4.9 | 2.7 | 2.7 | 1.7 | 4.6 | 2.7 | 0 | 2.7 | 4.9 | 2.7 | 3.0 | 1.0 | 0 | 4.9 | 4.9 | 4.9 | 0.1 |

| Ref No. | IC3001 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| REC | 0 | 0.8 | 0.8 | 4.9 | 1.2 | 0 | 1.6 | 0 | 2.0 | 0 | - | 4.9 | - | 0 | - | 0 | 0 | 4.9 | 0 | 0 |
| PLAY | 0 | 1.6 | 0.8 | 4.9 | 1.6 | 0 | 1.6 | 0 | 2.0 | 0 | - | 4.9 | - | 0 | - | 0 | 0 | 4.9 | 0 | 0 |
| STOP | 0 | 0.8 | 0.8 | 4.9 | 1.2 | 0 | 1.6 | 0 | 2.0 | 0 | - | 4.9 | - | 0 | - | 0 | 0 | 4.9 | 0 | 0 |

| Ref No. | IC4001 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| REC | - | 4.4 | 4.4 | - | - | 4.4 | 4.4 | 3.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 0 | 4.4 | 0 | 4.4 | 0 | 4.9 |
| PLAY | - | 4.4 | 4.4 | - | - | 4.4 | 4.4 | 3.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 0 | 4.4 | 0 | 4.4 | 0 | 4.9 |
| STOP | - | 4.4 | 4.4 | - | - | 4.5 | 4.5 | 3.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 0 | 4.5 | 0 | 4.4 | 0 | 4.9 |

| Ref No. | IC4001 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | | | | | | | | |
| REC | 4.9 | 0 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 8.9 | 4.4 | 4.4 | | | | | | | | |
| PLAY | 4.9 | 0 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 8.9 | 4.4 | 4.4 | | | | | | | | |
| STOP | 4.9 | 0 | 4.5 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.5 | 8.9 | 4.4 | 4.4 | | | | | | | | |

| Ref No. | IC4004 | | | | | | IC4005 | | | | | | IC4901 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | | 1 | 2 | 3 | 4 | 5 | | 1 | 2 | 3 | 4 | 5 | | | |
| REC | 4.9 | 0 | 1.2 | 4.9 | 5.7 | | 4.9 | 0 | 1.2 | 8.9 | 13.7 | | - | 1.6 | 0 | 2.5 | 5.0 | | | |
| PLAY | 4.9 | 0 | 1.2 | 4.9 | 5.7 | | 4.9 | 0 | 1.2 | 8.9 | 13.7 | | - | 1.6 | 0 | 2.5 | 5.0 | | | |
| STOP | 4.9 | 0 | 1.2 | 4.9 | 5.8 | | 4.9 | 0 | 1.2 | 8.9 | 13.7 | | - | 1.6 | 0 | 2.5 | 5.0 | | | |

| Ref No. | IC7404 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| REC | 0 | 2.4 | 1.9 | 0 | 2.8 | 2.5 | 3.3 | 5.0 |
| PLAY | 0 | 2.4 | 1.9 | 0 | 2.8 | 2.5 | 3.3 | 5.0 |
| STOP | 0 | 2.5 | 1.9 | 0 | 2.8 | 2.5 | 3.3 | 5.0 |

| Ref No. | IC7501 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| REC | 4.9 | 4.7 | 0 | 3.8 | 3.8 | 4.4 | 0 | 0 | - | - | 4.8 | 1.5 | 0 | 2.1 | 4.9 | 4.9 | 4.9 | 0 | 0.3 | 4.9 |
| PLAY | 4.9 | 4.7 | 0 | 3.8 | 3.8 | 4.4 | 0 | 0 | - | - | 4.8 | 1.5 | 0 | 2.1 | 4.9 | 4.9 | 4.9 | 0 | 0.3 | 4.9 |
| STOP | 4.9 | 4.8 | 0 | 3.8 | 3.8 | 4.4 | 0 | 0 | - | - | 4.8 | 1.4 | 0 | 4.5 | 5.0 | 4.9 | 4.9 | 0 | 0.3 | 4.9 |

| Ref No. | IC7501 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| REC | 0 | - | 1.8 | - | 0 | - | 4.9 | - | - | 0 | 1.8 | 1.7 | 0 | 4.9 | 2.6 | 0 | 0.3 | 4.9 | 4.9 | 4.9 |
| PLAY | 0 | - | 1.8 | - | 0 | - | 4.9 | - | - | 0 | 1.8 | 1.7 | 0 | 4.9 | 2.6 | 0 | 0.3 | 4.9 | 4.9 | 4.9 |
| STOP | 0 | - | 0 | - | 0 | - | 4.9 | - | - | 0 | 0 | 0 | 0 | 5.0 | 2.6 | 0 | 0.3 | 5.0 | 4.9 | 4.9 |

| Ref No. | IC7501 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| REC | - | - | - | - | 0.1 | - | 0 | 0 | - | - | - | - | 4.9 | 0 | 0 | 4.9 | - | 0 | 4.9 | 4.9 |
| PLAY | - | - | - | - | 0.1 | - | 0 | 0 | - | - | - | - | 4.9 | 0 | 0 | 4.9 | - | 0 | 4.9 | 4.9 |
| STOP | - | - | - | - | 0 | - | 0 | 0 | - | - | - | - | 4.9 | 0 | 0 | 5.0 | - | 0 | 4.9 | 4.9 |

| Ref No. | IC7501 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| REC | 0 | 0 | 0 | 2.5 | 4.9 | 0 | 0 | 0 | 4.9 | 4.9 | 0 | - | 0 | 0 | 5.1 | 4.9 | - | 0 | 4.9 | 4.9 |
| PLAY | 0 | 0 | 0 | 2.5 | 4.9 | 0 | 0 | 0 | 4.9 | 4.9 | 0 | - | 0 | 0 | 5.1 | 4.9 | - | 0 | 4.9 | 4.9 |
| STOP | 0 | 0 | 0 | 4.9 | 4.9 | 0 | 0 | 0 | 5.0 | 4.9 | 0 | - | 0 | 0 | 5.1 | 4.9 | - | 0 | 4.9 | 4.9 |

| Ref No. | IC7501 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| REC | 0 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 3.0 | 4.9 | 4.9 | 3.3 | - | - | - | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.7 | 0 |
| PLAY | 0 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 3.0 | 4.9 | 4.9 | 3.3 | - | - | - | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.7 | 0 |
| STOP | 0 | 4.9 | 4.9 | 5.0 | 4.9 | 4.9 | 0 | 4.9 | 4.9 | 3.3 | - | - | - | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 | 4.7 | 0 |

| Ref No. | IC7501 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | | | | |
| REC | 0 | 0 | 0 | 4.9 | 4.9 | 4.9 | 4.9 | 0 | 1.8 | 1.3 | 0 | 4.9 | 1.7 | 0 | - | 4.9 | | | | |
| PLAY | 0 | 0 | 0 | 4.9 | 4.9 | 4.9 | 4.9 | 0 | 1.8 | 1.3 | 0 | 4.9 | 1.7 | 0 | - | 4.9 | | | | |
| STOP | 0 | 0 | 0 | 4.9 | 4.9 | 5.0 | 4.9 | 0 | 1.8 | 1.3 | 0 | 5.0 | 1.7 | 0 | - | 4.9 | | | | |

| Ref No. | IC7502 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| REC | 4.9 | 3.0 | 4.4 | 3.9 | 0 | 2.2 | 2.2 | 5.0 | -28.0 | -28.0 | -28.0 | -28.0 | -28.0 | -24.4 | -24.4 | -20.8 | -28.0 | 5.0 | -28.0 | -28.0 |
| PLAY | 4.9 | 3.0 | 4.4 | 3.9 | 0 | 2.2 | 2.2 | 5.0 | -28.0 | -28.0 | -28.0 | -28.0 | -28.0 | -24.4 | -21.4 | -20.8 | -28.0 | 5.0 | -28.0 | -28.0 |
| STOP | 5.0 | 3.0 | 4.4 | 3.9 | 0 | 2.2 | 2.2 | 5.0 | -28.0 | -28.0 | -28.0 | -28.0 | -28.0 | -28.0 | -24.4 | -20.8 | -28.0 | 5.0 | -24.4 | -28.0 |

| Ref No. | IC7502 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| REC | -28.0 | -28.0 | -28.0 | -28.0 | -24.4 | -28.0 | -28.0 | -28.0 | -28.0 | -28.0 | -28.0 | -28.0 | -17.2 | -17.2 | -20.8 | -20.8 | -20.8 | -20.8 | -24.4 | -24.4 |
| PLAY | -24.4 | -28.0 | -28.0 | -24.4 | -24.4 | -28.0 | -28.0 | -28.0 | -28.0 | -28.0 | -28.0 | -28.0 | -17.2 | -17.2 | -24.4 | -20.8 | -24.4 | -24.4 | -20.8 | -20.8 |
| STOP | -28.0 | -28.0 | -28.0 | -24.4 | -20.7 | -28.0 | -28.0 | -28.0 | -28.0 | -28.0 | -28.0 | -28.0 | -20.8 | -20.8 | -24.4 | -20.8 | -28.0 | -20.8 | -24.4 | -17.1 |

| Ref No. | IC7502 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| REC | -13.5 | -20.6 | -28.0 | -28.0 | -28.0 | -28.0 | -20.6 | -24.3 | -20.8 | -20.8 | -17.1 | -28.0 | -28.0 | -28.0 | -28.0 | -24.4 | -24.4 | -24.4 | -24.4 | -24.4 |
| PLAY | -17.1 | -20.6 | -28.0 | -28.0 | -28.0 | -24.4 | -20.6 | -24.4 | -17.2 | -13.4 | -16.8 | -28.0 | -28.0 | -28.0 | -28.0 | -24.4 | -23.9 | -23.7 | -23.4 | -23.3 |
| STOP | -20.7 | -17.1 | -28.0 | -28.0 | -28.0 | -28.0 | -20.6 | -24.4 | -20.8 | -17.2 | -17.1 | -28.0 | -28.0 | -28.0 | -28.0 | -24.4 | -24.4 | -24.4 | -24.4 | -24.4 |

| Ref No. | IC7502 | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 61 | 62 | 63 | 64 | | | | | | | | | | | | | | | | |
| REC | -24.4 | -24.4 | -24.4 | -28.4 | | | | | | | | | | | | | | | | |
| PLAY | -24.4 | -24.4 | -24.4 | -28.4 | | | | | | | | | | | | | | | | |
| STOP | -24.4 | -24.4 | -24.4 | -28.4 | | | | | | | | | | | | | | | | |

| Ref No. | IC7503 | | | | | | IC7505 | | | | | | IC7506 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | | 1 | 2 | 3 | 4 | 5 | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| REC | 4.9 | 5.2 | 0 | - | - | | 2.2 | 3.3 | 0 | - | - | | 5.8 | 1.8 | 1.8 | 0 | 1.8 | 1.8 | 1.8 | 12.9 |
| PLAY | 4.9 | 5.2 | 0 | - | - | | 2.2 | 3.3 | 0 | - | - | | 5.8 | 1.8 | 1.8 | 0 | 1.8 | 1.8 | 1.8 | 12.9 |
| STOP | 5.0 | 5.2 | 0 | - | - | | 2.2 | 3.3 | 0 | - | - | | 5.8 | 1.8 | 1.8 | 0 | 1.8 | 1.8 | 1.8 | 12.9 |

| Ref No. / MODE | Q4001 | | | Q4002 | | | Q4003 | | | Q4004 | | | Q4005 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B |
| REC | 5.2 | -0.1 | 5.2 | 0 | 0 | -0.1 | 0 | 0 | -0.1 | 0 | 0 | -0.1 | 0 | 0 | -0.1 |
| PLAY | 5.2 | -0.1 | 5.2 | 0 | 0 | -0.1 | 0 | 0 | -0.1 | 0 | 0 | -0.1 | 0 | 0 | -0.1 |
| STOP | 5.2 | -0.1 | 5.2 | 0 | 0 | -0.1 | 0 | 0 | -0.1 | 0 | 0 | -0.1 | 0 | 0 | -0.1 |

| Ref No. / MODE | Q7401 | | | Q7503 | | | Q7504 | | | Q7507 | | | Q7508 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | E | C | B | E | C | B | E | C | B | 1 | 2 | 3 | E | C | B |
| REC | 2.7 | 0 | 2.1 | 0 | 3.9 | -1.0 | 0 | -1.0 | -1.0 | 2.3 | 0 | 1.6 | 1.7 | 5.0 | 1.6 |
| PLAY | 2.7 | 0 | 2.1 | 0 | 3.7 | -0.9 | 0 | -0.9 | -1.0 | 2.3 | 0 | 1.6 | 1.8 | 5.0 | 1.6 |
| STOP | 2.7 | 0 | 2.1 | 0 | 3.2 | -1.0 | 0 | -1.0 | -1.0 | 2.3 | 0 | 1.6 | 1.8 | 5.0 | 1.6 |

| Ref No. / MODE | Q7512 | | | Q7517 | | | Q7520 | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | E | C | B | E | C | B |
| REC | 5.0 | 12.9 | 5.6 | -20.1 | -20.1 | -19.4 | 0 | 2.7 | 0 |
| PLAY | 5.0 | 12.9 | 5.6 | -20.1 | -20.1 | -19.4 | 0 | 2.7 | 0 |
| STOP | 5.0 | 12.9 | 5.6 | -20.1 | -20.1 | -19.4 | 0 | 2.7 | 0 |

| Ref No. / MODE | QR4001 | | | QR4002 | | | QR4003 | | | QR4004 | | | QR7502 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B |
| REC | 0 | 0 | 4.9 | 0 | 0 | 2.3 | 0 | 5.2 | 0 | 0 | 5.2 | 0 | 0 | 0 | 2.2 |
| PLAY | 0 | 0 | 4.9 | 0 | 0 | 2.4 | 0 | 5.2 | 0 | 0 | 5.2 | 0 | 0 | 0 | 2.2 |
| STOP | 0 | 0 | 4.9 | 0 | 0 | 2.4 | 0 | 5.2 | 0 | 0 | 5.2 | 0 | 0 | 0 | 2.2 |

| Ref No. / MODE | QR7507 | | |
|---|---|---|---|
| | E | C | B |
| REC | 4.9 | 4.8 | 0 |
| PLAY | 4.9 | 4.8 | 0 |
| STOP | 4.9 | 4.8 | 0 |

| Ref No. | IC001 | | | | | | IC101 | | |
|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | | A | K | R |
| REC | -303 | 0 | 0 | 15.0 | 0.3 | | 0 | 4.2 | 2.4 |
| PLAY | -303 | 0 | 0 | 15.0 | 0.3 | | 0 | 4.2 | 2.4 |
| STOP | -303 | 0 | 0 | 15.0 | 0.3 | | 0 | 4.2 | 2.4 |

| Ref No. | IC102 | | | | | | | | IC103 | | | | | IC105 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| REC | 5.7 | 1.2 | 1.2 | 0 | 1.2 | 1.2 | 5.6 | 13.5 | 2.3 | 5.2 | 0 | 3.4 | 1.0 | 0 | 0 | 0 | 5.2 | 5.2 |
| PLAY | 5.7 | 1.2 | 1.2 | 0 | 1.2 | 1.2 | 5.6 | 13.5 | 2.3 | 5.2 | 0 | 3.4 | 1.0 | 0 | 0 | 0 | 5.2 | 5.2 |
| STOP | 5.7 | 1.2 | 1.2 | 0 | 1.2 | 1.2 | 5.6 | 13.5 | 2.3 | 5.2 | 0 | 3.4 | 1.0 | 0 | 0 | 0 | 5.2 | 5.2 |

| Ref No. | IC106 | | | | | IC109 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MODE | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| REC | 0 | 2.3 | 12.0 | 12.0 | 13.5 | 0 | 2.4 | 11.9 | 11.9 | 13.5 |
| PLAY | 0 | 2.3 | 12.0 | 12.0 | 13.5 | 0 | 2.4 | 11.9 | 11.9 | 13.5 |
| STOP | 0 | 2.3 | 12.0 | 12.0 | 13.5 | 0 | 2.4 | 11.9 | 11.9 | 13.5 |

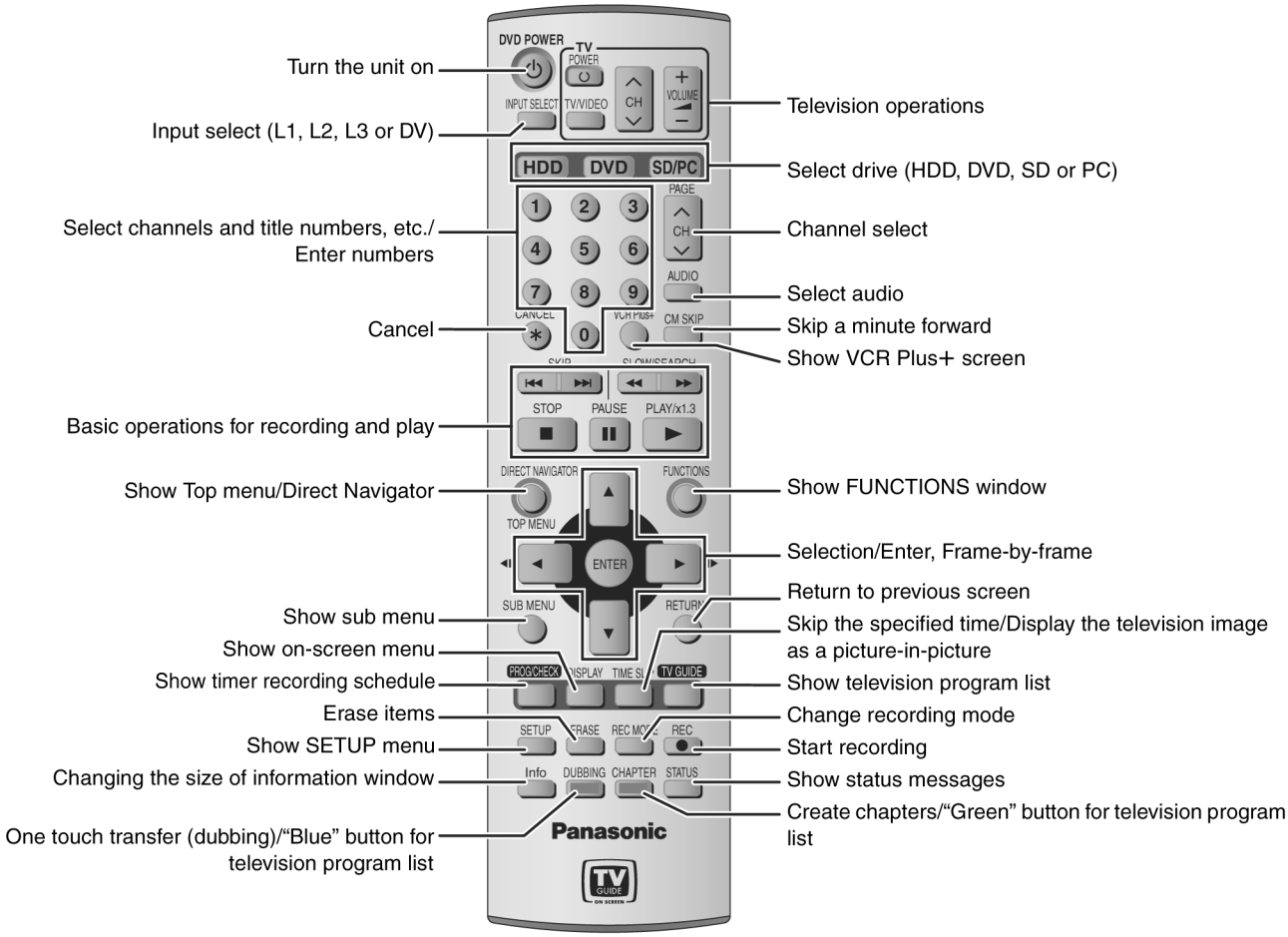
| Ref No. | Q101 | | | Q102 | | | Q103 | | | Q104 | | | Q105 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | E | C | B | E | C | B | E | C | B | E | C | B | G | D | S |
| REC | 8.2 | 13.5 | 8.0 | 8.3 | 0 | 8.0 | 13.5 | 8.0 | 13.0 | 0 | 5.3 | 0.4 | 8.3 | 4.1 | 2.1 |
| PLAY | 8.2 | 13.5 | 8.0 | 8.3 | 0 | 8.0 | 13.5 | 8.0 | 13.0 | 0 | 5.3 | 0.4 | 8.3 | 4.1 | 2.1 |
| STOP | 8.2 | 13.5 | 8.0 | 8.3 | 0 | 8.0 | 13.5 | 8.0 | 13.0 | 0 | 5.3 | 0.4 | 8.3 | 4.1 | 2.1 |

| Ref No. | Q106 | | | Q107 | | | Q110 | | | Q111 | | | Q113 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | E | C | B | E | C | B | E | C | B | E | C | B | G | D | S |
| REC | 0 | 4.2 | 0 | 0 | 0 | 0.7 | 13.5 | 13.5 | 12.8 | 0 | 0 | 0.6 | 8.3 | 8.7 | 5.3 |
| PLAY | 0 | 4.2 | 0 | 0 | 0 | 0.7 | 13.5 | 13.5 | 12.8 | 0 | 0 | 0.6 | 8.3 | 8.7 | 5.3 |
| STOP | 0 | 4.2 | 0 | 0 | 0 | 0.7 | 13.5 | 13.5 | 12.8 | 0 | 0 | 0.6 | 8.3 | 8.7 | 5.3 |

| Ref No. | Q114 | | | Q115 | | | Q116 | | | Q117 | | | Q118 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MODE | E | C | B | E | C | B | E | C | B | E | C | B | E | C | B |
| REC | 13.5 | 13.5 | 12.9 | 0 | 2.3 | 0 | 0 | 5.4 | 0.3 | 13.5 | 7.9 | 13.0 | 8.3 | 13.5 | 8.0 |
| PLAY | 13.5 | 13.5 | 12.9 | 0 | 2.3 | 0 | 0 | 5.4 | 0.3 | 13.5 | 7.9 | 13.0 | 8.3 | 13.5 | 8.0 |
| STOP | 13.5 | 13.5 | 12.9 | 0 | 2.3 | 0 | 0 | 5.4 | 0.3 | 13.5 | 7.9 | 13.0 | 8.3 | 13.5 | 8.0 |

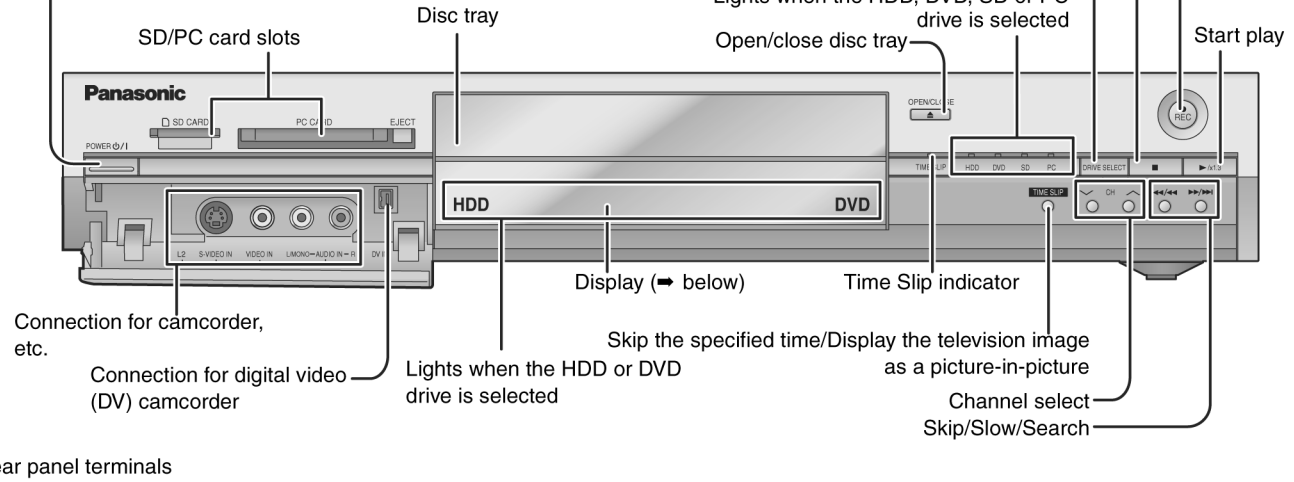
| Ref No. | Q119 | | |
|---|---|---|---|
| MODE | E | C | B |
| REC | 8.3 | 0 | 7.9 |
| PLAY | 8.3 | 0 | 7.9 |
| STOP | 8.3 | 0 | 7.9 |

# Remote control




# Main unit

**POWER button (POWER ⏻/I)**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.




Rear panel terminals

# The unit's display

